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Water Resources Data for North Carolina

Part 2. Water Quality Records

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the North Carolina Office of Water and Air Resources and with other Federal Agencies

CALENDAR FOR WATER YEAR 1973

1972

OCTOBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
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26	27	28	29	30		

DECEMBER

S	M	T	W	T	F	S
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31						

1973

JANUARY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
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28	29	30	31			

FEBRUARY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
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25	26	27	28			

MARCH

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
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APRIL

S	M	T	W	T	F	S
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29	30					

MAY

S	M	T	W	T	F	S
		1	2	3	4	5
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JUNE

S	M	T	W	T	F	S
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JULY

S	M	T	W	T	F	S
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29	30	31				

AUGUST

S	M	T	W	T	F	S
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19	20	21	22	23	24	25
26	27	28	29	30	31	

SEPTEMBER

S	M	T	W	T	F	S
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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

1973

Water Resources Data for North Carolina

Part 2. Water Quality Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the North Carolina Department of Water and Air Resources and with other Federal agencies

Prepared in cooperation with

North Carolina Office of Water and Air Resources
Environmental Protection Agency

Water resources records, 1973, for North Carolina are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for North Carolina
   Part 1. Surface Water Records

2. Water Resources Data for North Carolina
   Part 2. Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
436 Century Station Post Office Building
300 Fayetteville Street
Raleigh, North Carolina 27602

1974

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WATER RESOURCES DATA FOR NORTH CAROLINA, 1973

Part 2. Water Quality Records

INTRODUCTION

Water resources investigations of the U.S. Geological Survey include the collection of water-quality data on the chemical and physical characteristics of surface- and ground-water supplies of the Nation. Data on the quality of surface waters in North Carolina for the 1973 water year are presented in this report. These data were collected by the Water Resources Division of the U.S. Geological Survey under the direction of Ralph C. Heath, district chief.

Data on the quality of surface water (chemical, temperature, and sediment) were collected from designated sampling sites at predetermined intervals such as once-daily, weekly, monthly or less frequently, and at some sites data were recorded graphically or on punched paper tape at 15-, 30-, or 60-minute intervals. Locations of these surface-water quality sampling stations are shown in Figure 1 (see pages 10 and 11). The data published represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in North Carolina.

The Geological Survey has published records of chemical quality, water temperatures, and sediment since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Beginning with the 1964 water year, water-quality records have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year. These records will be published later in Geological Survey water-supply papers.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

North Carolina Department of Water and Air Resources, George E. Pickett, director.
Environmental Protection Agency.
The Tennessee Valley Authority furnished analytical results at seven stations under a joint program of sample collection and daily water temperatures at five additional stations.

DEFINITION OF TERMS

Terms related to water-quality and hydrologic data, as used in this report are defined as follows:

Acre-foot (AC-FT, ac-ft) is a quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons.

Bed material is the shifting portion of fragmented alluvial material of which the streambed is composed.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stablizing decomposable organic matter under aerobic conditions.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons, and represents a runoff of approximately 0.0372 inches from 1 square mile.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 milliliters is determined by the immediate or delayed incubation membrane filter method.

Cubic foot per second (cfs,CFS) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Mean discharge is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs)."

Drainage area of a stream at a specified location is that area, measured in horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (ug/l,UG/L) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (mg/l,MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 5. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, p. 5.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling) (Guy, 1969).

Particle-size classification, used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis (Guy, 1969).

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*...	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as NH_4^{+1}...	.05544	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2}).....	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*...	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2})..	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*.	.03640
Carbonate (CO_3^{-2})..	.03333	Nickel (Ni^{+2})*....	.03406
Chloride (Cl^{-1})....	.02821	Nitrate (NO_3^{-1})...	.01613
Chromium (Cr^{+6})*...	.11539	Nitrite (NO_2^{-1})...	.02174
Cobalt (Co^{+2})*.....	.03394	Phosphate (PO_4^{-3}).	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1})...	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1}).....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*.	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2})...	.02082
Hydroxide (OH^{-1})...	.05880	Zinc (Zn^{+2})*.....	.03060

*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by	Range of concentration in 1000 mg/l	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-505	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-296	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Percent sodium is the percentage of total cations made up by sodium (concentrations expressed in milliequivalents per liter).

Sediment is solid material that originates mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture mg/l.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific con-

ductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff". Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides. In North Carolina, the station 02105771 Cape Fear River near Acme is sampled as a part of this program, and an annual sample is also collected at the hydrologic benchmark station 03460000 Cataloochee Creek near Cataloochee.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected twice a year (at high and low flow), or more frequently, to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States. In North Carolina there is one such station (02092162 Neuse River at New Bern); however, there are a number of other stations sampled at various intervals under cooperative and local programs for which radiochemical-analysis data are given.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each water-quality station, gaging station, partial-record station, and miscellaneous sampling site has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of all types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence

the numbers are not consecutive. The complete 8-digit number for each station, such as 03460000 which appears just to left of the station name includes the 2-digit part number "03" plus the 6-digit downstream order number "460000". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 2 (South Atlantic Slope basins) and Part 3 (Ohio River basin). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

COLLECTION AND EXAMINATION OF DATA

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads. Discharge records for streams in North Carolina are published in the report "Water Resources Data for North Carolina, 1973, Part 1. Surface Water Records".

The locations of the surface-water quality sampling stations are shown in Figure 1 (see pages 10 and 11).

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

Water-quality information is presented for chemical quality, biological, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium adsorption ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water temperature data were collected by thermograph or temperature recorder, from which daily maximums and minimums are obtained, or from hand-thermometer readings at the time samples are collected for chemical-constituent analysis. Fluvial-

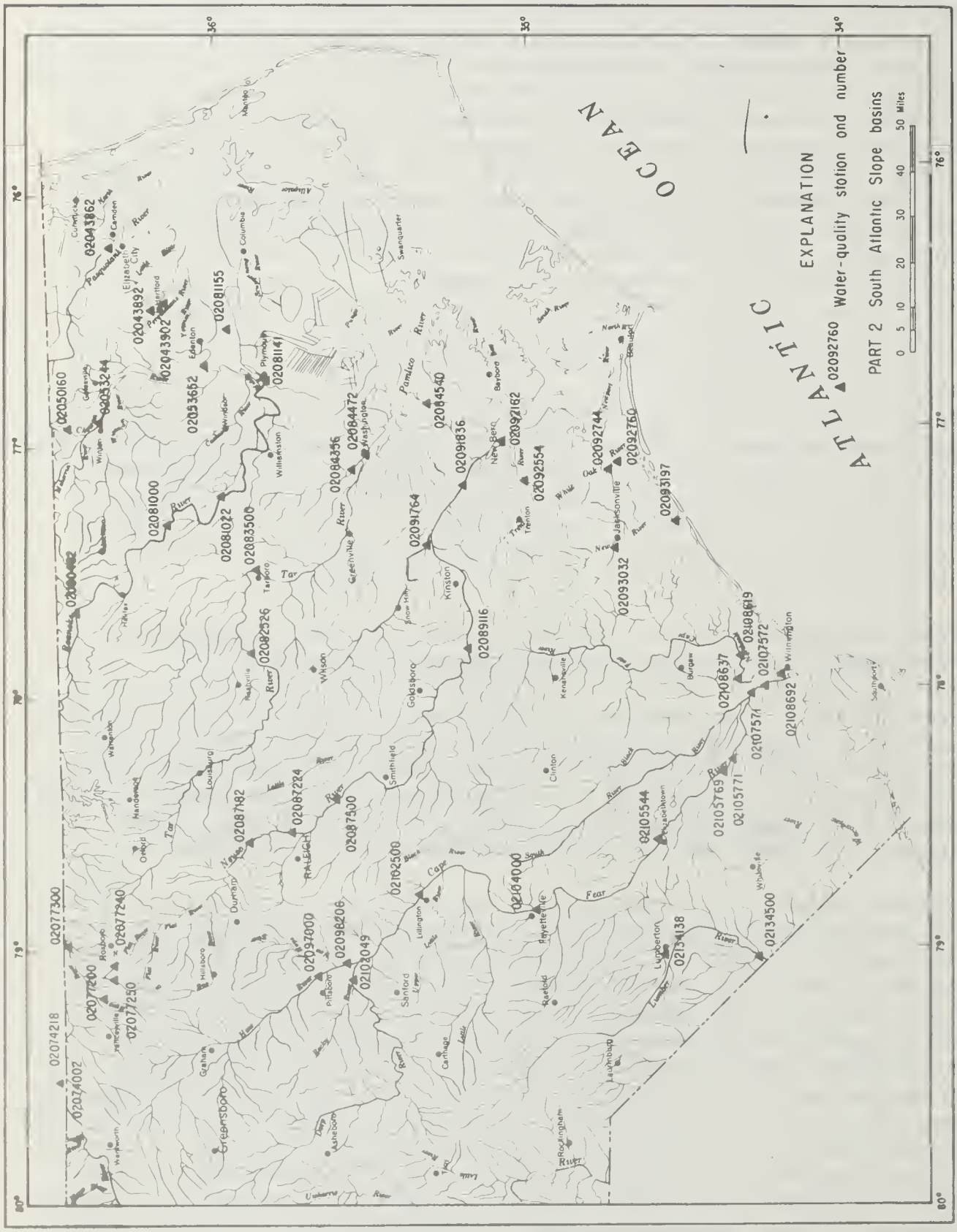

Figure 1. Map of eastern part of North Carolina showing locations of water-quality stations.

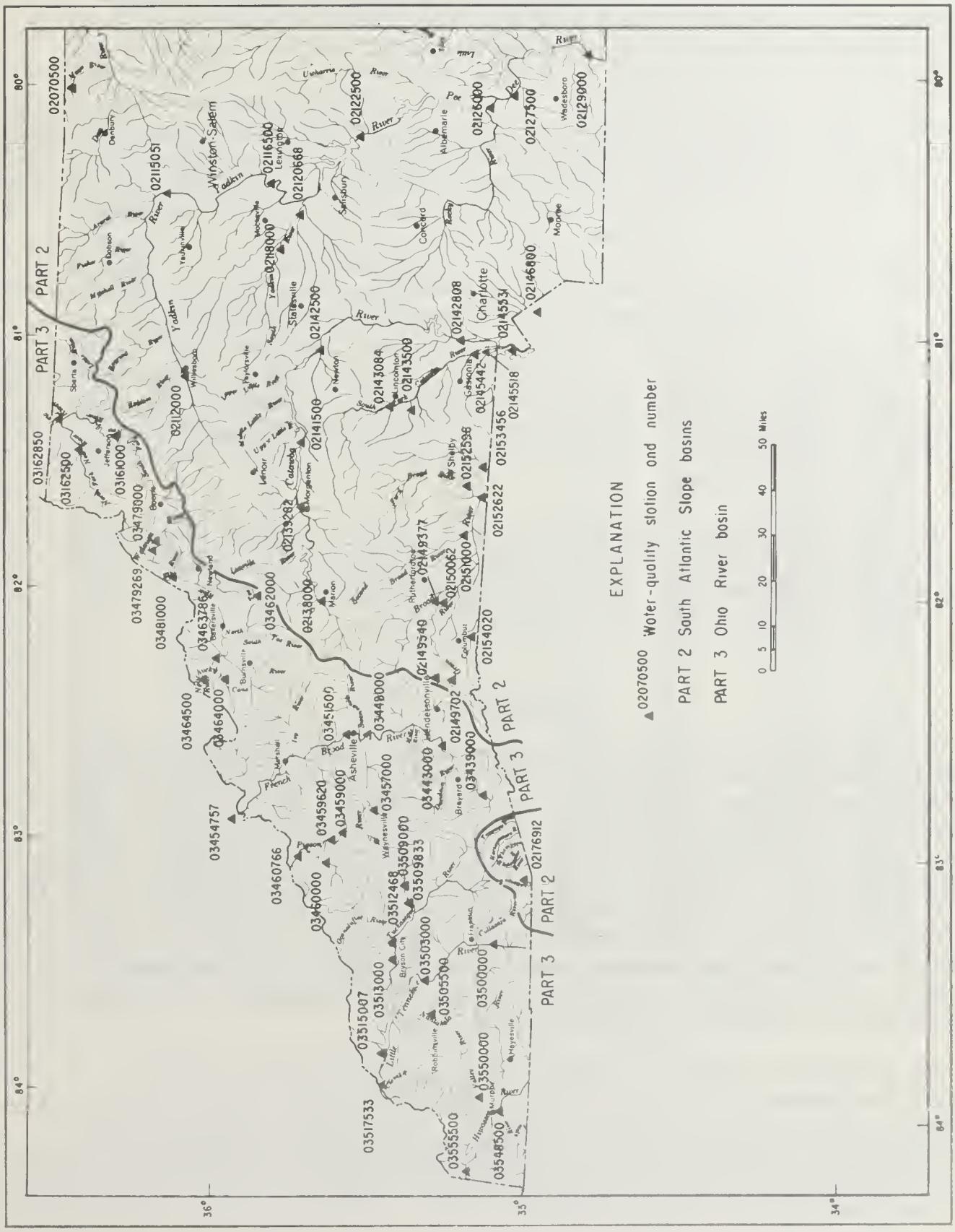

Figure 2. Map of western part of North Carolina showing locations of water-quality stations.

sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per liter (mg/l) and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/ml (grams per millileter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. To convert temperature in degrees Celsius to degrees Fahrenheit, see table 3, page 13.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," p. 2).

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge depending on the source of material and the turbulence and the mixing of the stream. Some must be sampled at several verticals across the channel to determine accurately the solute load.

At chemical quality stations where monitors (water-quality recorders) are installed, the records consist of daily maximum and minimum values for each constituent measured. More detailed records (hourly values) may be obtained from the district office of the U.S. Geological Survey at the address given on page II of this report.

Field Analyses

Field-measured analyses represent conditions only at the time of sampling. The accuracy of field-measured values for pH and specific conductance which use the same analytical technique as the laboratory may be slightly higher than the laboratory analyses because some changes in parameter occur during shipping and storage time in the labortory. Symbol "A" shown in tables, indicates field analyses.

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.6	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Temperature

Water temperatures are measured at some of the water-quality stations. At stations where continuously-recording thermographs are used, the records consist of maximum and minimum temperatures for each day and month.

In this report there are no daily stations where water temperatures were collected by hand thermometer, although this method was used in most cases when samples were collected for field or later laboratory analysis.

Large streams may have a small diurnal temperature change; shallow streams may have a daily range of a few degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross-section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment discharge for other periods of similar water discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream. Instantaneous suspended-sediment data are shown for many stations (all are stream-gaging stations) in the table, "Analyses of Samples Collected at Miscellaneous Sites", at the end of each part number. If the station is a chemical-quality station, these periodic suspended-

sediment data are included under the chemical-quality data for the station in the main body of the report.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

Table 4 below, shows the annual series of water-supply papers that give information on quality of surface waters in North Carolina. Data for the South Atlantic slope and eastern Gulf of Mexico basins are given in Part 2; and the Ohio River basin in Part 3.

Table 4.--Water-supply-paper numbers and parts, water years 1941-70

Year	Part 2	Part 3	Year	Part 2	Part 3
1941	942	942	1956	1450	1450
1942	950	950	1957	1520	1520
1943	970	970	1958	1571	1571
1944	1022	1022	1959	1641	1642
1945	1030	1030	1960	1741	1742
1946	1050	1050	1961	1881	1882
1947	1102	1102	1962	1941	1942
1948	1132	1132	1963	1947	1948
1949	1162	1162	1964	1954	1955
1950	1186	1186	1965	1961	1962
1951	1197	1197	1966	1991	1992
1952	1250	1250	1967	2011	2012
1953	1290	1290	1968	A2092	A2093
1954	1350	1350	1969	B2142	B2143
1955	1400	1400	1970	B2152	B2153

A In press. B In preparation

SELECTED REFERENCES

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Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved minerals and gases: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A1, 160 p.

Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurement of sediment discharge: U.S. Geol. Survey Bull. 1181-A, 47 p.

Colby, B. R., and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geol. Survey Water-Supply Paper 1357, 187 p.

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Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C3, 66 p.

Ritter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C3, 33 p.

U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.

——— 1941, Methods of analyzing sediment samples: Rept. 4.

——— 1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10.

——— 1957, The development and calibration of visual accumulation tube: Rept. 11.

——— 1957, Some fundamentals of particle size analysis: Rept. 12.

——— 1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.

——— 1961, The single stage sampler for suspended sediment: Rept. 13.

——— 1963, Determinations of fluvial sediment discharge: Rept. 14.

SOUTH ATLANTIC SLOPE AND EASTERN GULF OF MEXICO BASINS

PASQUOTANK RIVER BASIN

02043862 PASQUOTANK RIVER AT ELIZABETH CITY, N. C.

LOCATION.--Lat 36°18'05", long 76°13'05", Pasquotank County, at bridge on U.S. Highway 158, in Elizabeth City, and 0.5 miles below Knobbs Creek.

DRAINAGE AREA.--300 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1967, water years 1969-71 (partial-record station), October 1971 to June 1973 (discontinued).
Water temperatures: October 1957 to September 1967.

EXTREMES.--1957-67:
Chloride: Maximum, 8,020 mg/l Oct. 30 (B), 1958; minimum, 4.5 mg/l Mar. 6 (T), 1961.
Specific conductance: Maximum daily, 20,800 micromhos Oct. 29 (B), 1958; minimum daily, 58 micromhos July 21, 1965 and June 20 (T), 21 (T), 1966.
Water temperatures: Maximum, 31.5°C July 29, 30 (T) 1959, Sept. 1 (T), 1960 and July 13 (T), 1966; minimum, freezing point on several days in 1958 and 1966.

REMARKS.--Salinity station prior to 1968; top (T) and bottom (B) samples were collected once daily.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.										
24... A	1650	--	--	--	--	--	--	--	--	--
NOV.										
28...	0800	8.1	350	6.8	3.3	16	3.3	12	0	10
28... A	0800	--	--	--	--	--	--	--	--	8
JAN.										
23... A	0800	--	--	--	--	--	--	--	--	--
MAR.										
20...	1605	6.2	52	6.6	2.4	10	1.8	7	0	6
20... A	1605	--	--	--	--	--	--	--	--	7
APR.										
19... A	1455	--	--	--	--	--	--	--	--	--
MAY										
14...	1715	5.0	--	6.3	2.1	8.3	1.8	10	0	8
14... A	1715	--	--	--	--	--	--	10	0	8
JUNE										
19... A	1330	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.									
24... A	--	--	--	--	--	--	--	--	--
NOV.									
28...	21	25	.3	--	.27	--	.15	145	91
28... A	--	--	--	--	--	--	--	--	--
JAN.									
23... A	--	--	--	--	--	--	--	--	--
MAR.									
20...	15	18	.7	--	.25	--	.19	111	65
20... A	--	--	--	--	--	--	--	--	--
APR.									
19... A	--	--	--	--	--	--	--	--	--
MAY									
14...	12	13	.2	.2	--	.013	.090	40	55
14... A	--	--	--	--	--	--	--	--	--
JUNE									
19... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
24... A	--	--	--	--	--	120	6.2	16.0	20.0
NOV.									
28...	.20	31	21	50	1.3	140	5.8	--	--
28... A	--	--	--	--	--	165	5.9	8.5	7.0
JAN.									
23... A	--	--	--	--	--	135	5.6	6.5	17.5
MAR.									
20...	.15	26	21	43	.8	105	5.6	--	--
20... A	--	--	--	--	--	110	5.7	15.0	11.5
APR.									
19... A	--	--	--	--	--	85	5.8	16.0	24.5
MAY									
14...	.05	24	16	40	.7	92	5.5	--	--
14... A	--	--	--	--	--	90	6.3	22.5	21.0
JUNE									
19... A	--	--	--	--	--	170	6.4	26.0	27.0

02043862 PASQUOTANK RIVER AT ELIZABETH CITY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.						
24... A	--	9.1	--	1820	--	--
NOV.						
28...	65	--	30	--	.07	--
28... A	--	7.9	--	240	--	--
JAN.						
23... A	--	8.4	--	50	--	--
MAR.						
20...	280	--	28	--	.17	--
20... A	--	9.0	--	70	--	--
APR.						
19... A	--	7.9	--	100	--	--
MAY						
14...	440	--	51	--	.16	30
14... A	--	6.0	8.0	30	--	--
JUNE						
19... A	--	5.7	--	4000	--	--

PERQUIMANS RIVER BASIN

02043892 PERQUIMANS RIVER AT U.S. HIGHWAY 17, AT HERTFORD, N. C.

LOCATION.--Lat 36°11'40", long 76°28'00", Perquimans County, at bridge on U.S. Highway 17 at Hertford, and 0.75 mile above Mill Creek.

DRAINAGE AREA.--94 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1960, water years 1969-70, 1972-73 (discontinued, partial-record station).
Water temperatures: October 1957 to September 1960.

EXTREMES.--1957-60:
Chloride: Maximum, 1,290 mg/l Dec. 25, 1958; minimum, 8.0 mg/l Feb. 1-15, 1960.
Specific conductance: Maximum daily, 4,290 micromhos Dec. 25, 1958; minimum daily, 5.3 micromhos Feb. 2, 1960.
Water temperatures: Maximum, 30.5°C Aug. 7, 1958; minimum, freezing point Feb. 18, 1958, Mar. 12-14, 1960.

REMARKS.--Operated as a salinity station during water years 1958-60. Records of specific conductance (unpublished) of samples collected once daily October 1957 to September 1959 are available in district office in Raleigh, N. C.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.									
19...	1255	8.5	0	5.3	4.4	17	3.6	16	0
19... A	1255	--	--	--	--	--	--	--	--
JAN.									
05...	1115	9.5	0	9.0	3.8	11	3.2	19	0
05... A	1115	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.									
19...	13	12	28	.2	1.9	.098	115	96	.16
19... A	--	--	--	--	--	--	--	--	--
JAN.									
05...	16	20	16	.3	.40	.054	127	86	.17
05... A	--	--	--	--	--	--	--	--	--

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.								
19...	31	18	51	1.3	170	6.6	--	--
19... A	--	--	--	--	--	6.3	23.0	18.0
JAN.								
05...	38	23	36	.8	140	6.3	--	--
05... A	--	--	--	--	--	5.8	9.0	15.5

02043892 PERQUIMANS RIVER AT U.S. HIGHWAY 17, AT HERTFORD, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT.				
19...	140	--	6.4	.20
19... A	--	6.2	--	--
JAN.				
05...	200	--	15	.31
05... A	--	11.4	--	--

PERQUIMANS RIVER BASIN

02043902 PERQUIMANS RIVER ABOVE SUTTON CREEK, NEAR HERTFORD, N. C.

LOCATION.--Lat 36°10'00", long, 76°25'10", Perquimans County, 1.8 miles upstream from Sutton Creek, and 3.2 miles southeast of Hertford.

DRAINAGE AREA.--130 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-70, 1972-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
JAN.									
05...	1000	11	0	10	3.3	11	3.7	19	0
05... A	1000	--	--	--	--	--	--	--	--

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
JAN.									
05...	16	19	19	.3	.50	.049	132	88	.18
05... A	--	--	--	--	--	--	--	--	--

DATE	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
JAN.								
05...	39	23	36	.8	140	6.5	--	--
05... A	--	--	--	--	--	5.2	8.0	15.5

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
JAN.				
05...	150	--	9.6	.18
05... A	--	10.7	--	--

02050160 CHOWAN RIVER NEAR EURE, N. C.

LOCATION.--Lat 36°31'09", long 76°54'13", Gates County, water-quality recorder at Gatlington Landing, 1.8 miles downstream from Somerton Creek, and 6.3 miles northwest of Eure.

DRAINAGE AREA.--2,550 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1967 to June 1973 (discontinued).
Water temperatures: October 1967 to December 1968, January to June 1971, November 1971 to April 1973 (discontinued).

EXTREMES.--October 1972 to April 1973:
Dissolved oxygen: Maximum recorded, 13.6 mg/l Feb. 2, 22; minimum recorded, 4.5 mg/l Oct. 1.
Specific conductance: Maximum recorded, 784 micromhos Dec. 14; minimum recorded, 42 micromhos Feb. 3.
Water temperatures: Maximum recorded, 25.0°C Oct. 1; minimum recorded, 1.5°C Jan. 17.

Period of record:
Dissolved oxygen (1971-73): Maximum recorded, 14.9 mg/l Dec. 7, 1971; minimum recorded, 2.5 mg/l July 15, 1972.
Dissolved solids (1968-70): Maximum, 511 mg/l Jan. 10, 1969; minimum, 59 mg/l Mar. 17, 1970.
Hardness (1968-70): Maximum, 48 mg/l Jan. 6, 20, 1969; minimum, 18 mg/l Feb. 5, Apr. 6, 1970.
Specific conductance (1967-70, 1971-73): Maximum, 880 micromhos Dec. 19, 1967; minimum recorded, 15 micromhos Feb. 26, 1972.
Water temperatures (1967-68, 1971-73): Maximum, 35°C July 5, 1968; minimum, freezing point Jan. 10-12, 17-19, 1968.

REMARKS.--Records of specific conductance, dissolved oxygen, and temperature are fragmentary, with records for several months missing or incomplete.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.										
24...A	1330	--	--	--	--	--	--	--	--	--
NOV.										
27...	1500	7.9	99	4.3	1.3	3.4	2.0	11	0	9
27...A	1600	--	--	--	--	--	--	--	--	13
JAN.										
22...A	1430	--	--	--	--	--	--	--	--	--
MAR.										
20...	1245	7.5	16	6.7	1.7	18	2.2	24	0	20
20...A	1245	--	--	--	--	--	--	--	--	20
APR.										
20...A	0915	--	--	--	--	--	--	--	--	--
MAY										
14...	1500	9.1	--	6.2	1.5	5.0	1.7	20	0	16
14...A	1500	--	--	--	--	--	--	20	0	21
JUNE										
19...A	1115	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.									
24...A	--	--	--	--	--	--	--	--	--
NOV.									
27...	7.2	9.2	.2	--	.00	--	.000	65	39
27...A	--	--	--	--	--	--	--	--	--
JAN.									
22...A	--	--	--	--	--	--	--	--	--
MAR.									
20...	11	22	.5	--	.09	--	.041	106	82
20...A	--	--	--	--	--	--	--	--	--
APR.									
20...A	--	--	--	--	--	--	--	--	--
MAY									
14...	7.2	6.1	.2	.3	--	.003	.13	41	47
14...A	--	--	--	--	--	--	--	--	--
JUNE									
19...A	--	--	--	--	--	--	--	--	--

02050160 CHOWAN RIVER NEAR EURE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
24...A	--	--	--	--	--	80	6.8	14.0	19.0
NOV.									
27...	.09	16	7	28	.4	50	6.0	--	--
27...A	--	--	--	--	--	60	6.8	7.0	15.0
JAN.									
22...A	--	--	--	--	--	140	6.8	6.0	16.7
MAR.									
20...	.14	23	4	60	1.6	132	6.2	--	--
20...A	--	--	--	--	--	140	5.7	14.5	12.5
APR.									
20...A	--	--	--	--	--	69	6.3	18.0	24.6
MAY									
14...	.06	22	5	31	.5	75	6.3	--	--
14...A	--	--	--	--	--	75	6.4	22.0	23.5
JUNE									
19...A	--	--	--	--	--	88	6.4	26.5	22.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.						
24...A	--	7.7	--	48	--	--
NOV.						
27...	50	--	18	--	.06	--
27...A	--	9.7	--	68	--	--
JAN.						
22...A	--	11.6	--	208	--	--
MAR.						
20...	50	--	24	--	.26	--
20...A	--	7.9	--	80	--	--
APR.						
20...A	--	7.3	--	80	--	--
MAY						
14...	80	--	16	--	.17	0
14...A	--	8.0	17	50	--	--
JUNE						
19...A	--	6.0	--	50	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), OCTOBER 1972 to APRIL 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	153	108	130	162	116	135	110	77	85	152	106	115
2	---	---	---	183	92	114	113	88	96	164	130	145
3	112	103	109	102	84	93	135	92	104	151	130	139
4	111	92	100	117	85	95	181	93	119	230	150	197
5	101	85	90	135	94	106	220	165	180	---	---	---
6	89	74	82	111	98	105	301	213	237	---	---	---
7	215	82	96	130	97	109	421	278	322	---	---	---
8	194	80	96	145	108	119	457	370	414	---	---	---
9	192	77	96	133	105	113	578	435	496	---	---	---
10	209	70	82	304	115	133	568	432	436	---	---	---
11	---	---	---	130	108	117	685	441	529	---	---	---
12	---	---	---	125	109	115	575	452	513	---	---	---
13	---	---	---	121	102	109	615	450	543	---	---	---
14	---	---	---	113	103	108	784	444	528	---	---	---
15	---	---	---	150	114	120	574	430	488	---	---	---
16	---	---	---	147	120	129	446	242	357	---	---	---
17	---	---	---	140	122	127	363	309	331	241	131	189
18	---	---	---	144	123	133	328	298	304	270	142	186
19	---	---	---	140	119	133	323	290	306	195	134	156
20	---	---	---	134	118	127	349	278	297	161	124	139
21	---	---	---	144	129	132	346	315	329	213	116	147
22	---	---	---	133	126	130	355	307	323	199	81	129
23	105	101	103	134	122	128	372	340	353	212	102	145
24	102	91	98	178	110	125	389	76	247	188	121	153
25	137	91	108	176	100	118	114	76	93	233	100	151
26	188	106	118	116	93	105	83	76	79	217	130	172
27	145	104	116	145	105	112	142	75	96	280	84	140
28	118	102	110	208	107	118	167	123	139	202	64	100
29	166	111	129	150	63	73	149	131	139	201	76	105
30	181	117	146	75	63	68	163	112	136	191	145	170
31	153	122	137	---	---	---	142	103	112	148	112	130
MONTH	---	---	---	304	63	115	784	75	283	---	---	---

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SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), OCTOBER 1972 TO APRIL 1973

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	185	112	124	145	112	132	---	---	---	---	---	---
2	99	44	62	129	94	110	---	---	---	---	---	---
3	56	42	49	121	66	87	63	56	59	---	---	---
4	47	---	---	101	56	78	87	51	63	---	---	---
5	56	---	---	93	66	77	93	58	66	---	---	---
6	54	---	---	129	89	105	73	56	61	---	---	---
7	76	---	---	110	93	105	71	61	66	---	---	---
8	31	---	---	148	86	113	73	57	67	---	---	---
9	22	---	---	128	85	102	80	60	69	---	---	---
10	33	---	---	131	82	94	213	63	72	---	---	---
11	57	---	---	104	85	94	66	62	70	---	---	---
12	35	---	---	119	83	97	70	57	62	---	---	---
13	49	---	---	147	78	94	66	54	59	---	---	---
14	64	---	---	101	81	89	75	51	57	---	---	---
15	61	---	---	---	---	---	71	51	57	---	---	---
16	---	---	---	---	---	---	64	51	59	---	---	---
17	---	---	---	---	---	---	73	51	61	---	---	---
18	---	---	---	---	---	---	105	60	74	---	---	---
19	---	---	---	191	117	137	112	63	73	---	---	---
20	---	---	---	257	113	137	86	66	72	---	---	---
21	---	---	---	214	91	145	110	64	77	---	---	---
22	269	64	118	185	89	116	94	69	78	---	---	---
23	579	237	398	214	114	163	87	71	78	---	---	---
24	401	102	222	278	130	180	97	72	82	---	---	---
25	243	93	153	236	90	152	99	74	80	---	---	---
26	205	124	146	224	86	140	---	---	---	---	---	---
27	163	85	122	169	75	109	---	---	---	---	---	---
28	167	95	122	116	86	101	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	579	---	---	---	---	---	---	---	---	---	---	---
YEAR	784	42	---									

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, OCTOBER 1972 TO APRIL 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.6	4.5	5.1	6.8	6.4	6.6	9.3	9.0	9.2	12.5	11.4	12.1
2	---	---	---	7.0	6.4	6.6	9.5	9.0	9.3	11.7	10.8	11.4
3	6.2	5.6	5.8	7.2	6.4	6.8	9.5	9.1	9.2	11.4	10.7	11.1
4	6.9	6.2	6.5	6.6	5.9	6.2	9.4	9.0	9.2	11.4	10.7	11.1
5	7.1	6.7	6.9	5.9	5.6	5.7	9.2	8.9	9.0	---	---	---
6	7.8	7.0	7.5	5.9	5.4	5.6	9.2	8.9	9.0	---	---	---
7	7.3	6.4	6.7	6.1	5.6	5.9	9.0	8.7	8.9	---	---	---
8	6.4	6.1	6.2	6.8	6.1	6.4	9.0	8.6	8.9	---	---	---
9	6.4	6.0	6.2	6.8	6.1	6.5	9.3	8.7	9.0	---	---	---
10	6.7	6.3	6.5	6.3	5.8	6.0	9.2	8.6	8.9	---	---	---
11	---	---	---	6.7	6.2	6.6	8.8	8.1	8.5	---	---	---
12	---	---	---	6.9	6.5	6.6	8.5	8.0	8.3	---	---	---
13	---	---	---	6.9	6.4	6.6	8.6	8.0	8.3	---	---	---
14	---	---	---	7.3	6.7	6.9	8.7	8.2	8.5	---	---	---
15	---	---	---	6.8	6.4	6.5	8.8	8.4	8.6	---	---	---
16	---	---	---	7.2	6.6	6.8	9.3	8.7	8.9	---	---	---
17	---	---	---	8.0	7.3	7.6	10.2	9.3	9.8	---	---	---
18	---	---	---	8.3	7.6	8.0	10.5	10.1	10.3	---	---	---
19	---	---	---	8.7	8.0	8.2	10.8	10.5	10.6	---	---	---
20	---	---	---	8.8	8.4	8.5	11.1	10.8	10.9	---	---	---
21	---	---	---	8.7	8.3	8.5	11.0	10.8	10.9	---	---	---
22	---	---	---	8.9	8.6	8.8	10.9	10.5	10.7	---	---	---
23	8.4	7.4	7.8	9.1	8.8	8.9	10.5	10.1	10.3	12.8	11.5	12.0
24	8.7	7.9	8.4	9.5	9.0	9.3	10.3	9.7	10.0	11.5	10.3	11.1
25	8.6	8.0	8.2	10.4	9.4	9.7	10.2	9.8	10.0	11.3	9.8	10.4
26	8.1	7.6	7.8	10.9	9.6	10.0	10.1	9.8	9.9	11.5	10.3	10.8
27	7.7	7.1	7.4	9.8	9.4	9.6	10.0	9.6	9.8	12.2	10.4	11.7
28	7.7	7.1	7.4	9.8	9.6	9.7	11.7	9.7	10.6	12.1	11.4	11.8
29	7.4	6.9	7.2	9.8	9.1	9.5	12.0	11.6	11.8	12.1	11.3	11.8
30	7.2	6.9	7.0	9.4	9.1	9.2	12.2	11.9	12.0	11.3	10.5	10.9
31	7.2	6.5	6.8	---	---	---	12.5	12.1	12.3	12.0	11.2	11.6
MONTH	---	---	---	10.9	5.4	7.6	12.5	8.0	9.7	---	---	---

02050160 CHOWAN RIVER NEAR EURE, N. C.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, OCTOBER 1972 TO APRIL 1973

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.1	11.8	12.6	10.1	9.8	10.0	---	---	---	---	---	---
2	13.6	13.0	13.4	11.4	10.0	10.6	---	---	---	---	---	---
3	13.0	11.5	12.1	11.6	11.1	11.4	8.2	7.7	7.9	---	---	---
4	11.5	10.9	11.2	11.6	10.5	11.2	8.1	5.8	6.9	---	---	---
5	11.4	10.6	11.0	10.5	9.6	10.1	6.3	5.4	5.7	---	---	---
6	11.3	10.8	11.1	10.1	9.4	9.7	7.0	5.9	6.3	---	---	---
7	11.0	9.9	10.4	9.4	9.0	9.2	7.2	6.7	7.0	---	---	---
8	10.1	9.6	9.8	9.1	8.7	9.0	7.5	6.9	7.0	---	---	---
9	9.7	9.1	9.4	9.1	8.8	8.9	7.4	6.7	6.9	---	---	---
10	9.3	8.2	8.6	8.9	8.6	8.8	8.4	7.5	7.8	---	---	---
11	9.7	8.3	9.0	8.7	8.3	8.6	8.6	8.0	8.3	---	---	---
12	10.5	8.6	9.4	8.6	7.2	8.1	9.0	8.3	8.7	---	---	---
13	11.1	5.6	8.8	8.3	7.7	8.0	9.4	9.0	9.1	---	---	---
14	11.6	8.6	10.0	7.9	7.4	7.7	9.8	8.9	9.4	---	---	---
15	11.7	10.6	11.2	---	---	---	10.1	8.9	9.5	---	---	---
16	---	---	---	---	---	---	10.1	---	---	---	---	---
17	---	---	---	---	---	---	9.6	---	---	---	---	---
18	---	---	---	---	---	---	9.1	---	---	---	---	---
19	---	---	---	7.9	7.2	7.7	7.9	---	---	---	---	---
20	---	---	---	8.3	7.2	9.0	---	---	---	---	---	---
21	---	---	---	9.0	7.8	8.5	---	---	---	---	---	---
22	13.6	11.3	12.8	9.6	9.0	9.3	---	---	---	---	---	---
23	11.5	8.6	10.0	10.2	9.2	9.7	---	---	---	---	---	---
24	12.0	9.8	11.1	10.7	9.8	10.3	---	---	---	---	---	---
25	11.7	10.2	11.1	11.6	10.5	11.0	---	---	---	---	---	---
26	11.0	10.2	10.7	11.4	10.3	10.9	---	---	---	---	---	---
27	11.0	10.3	10.8	10.6	10.1	10.4	---	---	---	---	---	---
28	10.7	10.0	10.3	10.2	9.9	10.0	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	13.6	5.6	10.7	---	---	---	---	---	---	---	---	---
YEAR	13.6	4.5	---									

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO APRIL 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	25.0	22.0	23.5	15.5	14.5	15.0	8.0	7.0	7.5	9.0	7.0	8.0
2	---	---	---	15.5	14.0	15.0	8.0	6.0	7.0	10.0	9.0	9.5
3	19.5	19.0	19.5	16.0	15.0	15.5	8.0	6.0	7.0	10.0	9.0	9.5
4	19.5	17.5	18.5	16.5	16.0	16.5	8.0	6.0	7.0	9.0	8.5	9.0
5	18.5	17.5	18.0	17.5	16.0	16.5	8.0	6.0	7.0	---	---	---
6	18.5	17.0	18.0	18.0	15.5	16.5	8.0	7.5	8.0	---	---	---
7	19.5	19.0	19.0	17.0	15.0	16.0	10.0	8.0	9.0	---	---	---
8	20.0	17.5	19.0	16.0	15.0	15.5	9.5	8.0	8.5	---	---	---
9	19.0	17.0	18.5	18.0	14.5	15.5	9.0	8.0	8.5	---	---	---
10	19.0	16.5	17.5	17.0	14.0	15.5	9.5	9.0	9.0	---	---	---
11	---	---	---	15.0	13.5	14.5	11.0	9.5	10.5	---	---	---
12	---	---	---	15.5	13.0	14.5	11.0	10.5	10.5	---	---	---
13	---	---	---	15.5	13.0	14.5	10.5	9.0	10.0	---	---	---
14	---	---	---	14.5	13.0	14.0	11.0	9.5	10.5	---	---	---
15	---	---	---	15.5	14.5	15.0	10.5	10.0	10.0	---	---	---
16	---	---	---	15.0	11.5	13.0	10.0	9.0	9.5	---	---	---
17	---	---	---	13.0	10.0	10.5	9.0	6.5	7.5	3.0	1.5	2.5
18	---	---	---	10.0	9.0	10.0	6.5	5.0	5.5	3.5	2.0	3.0
19	---	---	---	10.0	9.0	9.0	5.0	3.5	4.5	4.0	3.0	3.5
20	---	---	---	9.5	8.0	8.5	5.0	3.5	4.5	5.0	4.0	4.5
21	---	---	---	10.0	9.0	9.5	5.0	4.5	5.0	5.5	4.5	5.0
22	---	---	---	10.5	9.0	9.0	6.5	5.0	6.0	5.0	5.0	5.0
23	13.5	12.5	13.0	9.0	7.5	8.0	7.0	6.5	6.5	7.0	5.0	5.5
24	14.5	13.5	13.5	8.5	6.0	7.5	7.5	7.0	7.0	8.5	7.5	8.0
25	14.5	14.0	14.0	7.5	5.5	6.5	8.0	7.5	7.5	9.0	6.5	8.0
26	14.5	13.5	14.0	7.0	6.0	6.5	9.0	8.0	8.0	8.0	6.0	7.5
27	15.0	13.5	14.5	7.5	6.0	6.5	9.5	7.5	8.0	8.0	7.0	7.5
28	14.5	13.5	14.0	7.5	5.5	6.5	8.5	6.5	7.5	9.0	7.5	8.0
29	15.0	13.5	14.5	8.0	6.5	7.5	8.5	6.5	7.5	8.5	8.0	8.0
30	15.5	14.5	15.0	8.0	7.5	8.0	8.0	7.0	7.5	9.0	7.5	8.5
31	16.5	15.0	15.5	---	---	---	9.0	7.5	7.5	8.5	6.0	7.0
MONTH	---	---	---	18.0	5.5	12.0	11.0	3.5	7.5	---	---	---

02050160 CHOWAN RIVER NEAR EURE, N. C.--Continued

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO APRIL 1973

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.0	5.0	6.0	8.0	5.0	7.0	---	---	---	---	---	---
2	7.5	6.0	6.5	7.5	6.0	7.0	---	---	---	---	---	---
3	8.5	7.5	8.5	7.5	7.0	7.5	16.0	15.5	15.5	---	---	---
4	10.0	8.0	9.0	9.5	7.5	8.5	16.0	15.0	16.0	---	---	---
5	9.5	8.0	9.0	11.0	9.5	10.0	16.0	15.5	15.5	---	---	---
6	9.5	8.5	9.0	12.0	11.0	11.5	15.5	14.5	15.0	---	---	---
7	10.0	9.0	9.5	12.0	11.5	11.5	15.5	15.0	15.5	---	---	---
8	10.0	8.5	9.5	12.0	11.0	11.5	15.5	14.5	15.0	---	---	---
9	10.0	9.0	9.0	13.5	12.0	12.5	15.0	13.0	14.0	---	---	---
10	9.0	7.0	8.0	13.0	12.5	13.0	14.5	14.0	14.0	---	---	---
11	7.0	6.0	6.5	13.5	12.0	12.5	14.5	13.5	14.0	---	---	---
12	6.5	5.0	5.5	14.0	12.0	12.5	14.0	12.5	13.0	---	---	---
13	6.0	4.0	5.0	15.0	13.0	14.0	14.0	11.0	12.5	---	---	---
14	5.5	4.0	4.5	16.5	13.5	15.0	13.0	11.0	12.0	---	---	---
15	4.5	3.5	4.0	---	---	---	13.0	11.0	12.0	---	---	---
16	---	---	---	---	---	---	13.5	11.5	12.5	---	---	---
17	---	---	---	---	---	---	14.0	12.5	13.5	---	---	---
18	---	---	---	---	---	---	15.0	13.5	14.5	---	---	---
19	---	---	---	15.5	14.5	15.0	16.0	13.5	15.0	---	---	---
20	---	---	---	16.0	14.0	15.0	17.5	15.5	16.5	---	---	---
21	---	---	---	14.5	14.0	14.5	18.5	16.5	17.5	---	---	---
22	6.5	5.0	5.5	13.5	12.0	12.5	19.0	17.5	18.5	---	---	---
23	6.5	4.5	6.0	12.0	10.0	11.0	20.0	18.0	19.0	---	---	---
24	6.5	5.0	6.0	12.0	9.0	10.5	20.5	18.5	19.5	---	---	---
25	7.5	5.0	6.5	13.5	10.0	11.0	21.0	20.0	20.5	---	---	---
26	7.5	6.0	7.0	12.0	9.5	10.5	---	---	---	---	---	---
27	8.0	6.5	7.5	13.0	12.0	12.5	---	---	---	---	---	---
28	8.0	6.5	7.0	13.0	10.5	12.0	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	10.0	3.5	7.0	---	---	---	---	---	---	---	---	---
YEAR	25.0	1.5	11.0									

CHOWAN RIVER BASIN

02053244 CHOWAN RIVER AT WINTON, N. C.

LOCATION.--Lat 36°24'00", long 76°55'50", Hertford County, at bridge, draw section on U.S. Highway 158 and State Highway 97, at Winton, and 2.7 miles downstream from Meherrin River.

DRAINAGE AREA.--4,200 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1954 to September 1967, water years 1969-73 (discontinued, partial-record station).
Water temperatures: October 1954 to September 1967.

EXTREMES.--1954-67:
Chloride: Maximum, 398 mg/l Dec. 15, 1958; minimum, 2.9 mg/l Aprl 1-30, 1958.
Specific conductance: Maximum daily, 1,400 micromhos Dec. 13, 15, 1958; minimum daily, 36 micromhos May 12, 1958.
Water temperatures: Maximum, 30.5°C Aug. 5, 7, 8, 1955 and July 27, 1957; minimum, freezing point Feb. 12, 1960.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
JAN.									
05...	1210	8.9	0	6.4	1.5	14	2.0	19	0
05... A	1210	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
JAN.									
05...	16	11	18	.2	.20	.000	88	72	.12
05... A	--	--	--	--	--	--	--	--	--

02053244 CHOWAN RIVER AT WINTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
JAN.								
05...	22	7	55	1.3	120	6.6	--	--
05... A	--	--	--	--	--	--	6.0	15.5

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
JAN.				
05...	80	--	7.6	.14
05... A	--	10.7	--	--

CHOWAN RIVER BASIN

02053652 CHOWAN RIVER NEAR EDENHOUSE, N. C.

LOCATION.--Lat 36°02'48", long 76°41'48", Bertie County, at bridge on U.S. Highway 17, 1 mile northeast of Edenhouse, and 3.8 miles downstream from Rockyhock Creek.

DRAINAGE AREA.--4,871 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1967, water years 1968-71 (partial-record station), October 1971 to June 1973 (discontinued).
Water temperatures: October 1957 to September 1967.

EXTREMES.--1957-67:
Chloride: Maximum, 9,140 mg/l Nov. 11 (B), 1958; minimum, 3.0 mg/l June 1-30, 1961.
Specific conductance: Maximum daily, 23,500 micromhos Nov. 11 (B), 1958; minimum daily, 43 micromhos Sept. 22 (B), 1960.
Water temperatures: Maximum, 33.0°C June 11 (T), 1959; minimum, freezing point Jan. 24, 25, 1961 and Jan. 31 (T), 1966.

REMARKS.--Salinity station prior to 1968; top (T) and bottom (B) samples were collected once daily.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)
OCT.										
26...A	1515	--	--	--	--	--	--	--	--	--
NOV.										
28...B	1145	9.7	99	5.4	1.7	4.5	2.6	17	0	14
28...A	1145	--	--	--	--	--	--	--	--	11
28...C	1200	9.9	233	4.5	1.5	4.2	2.6	16	0	13
28...A	1200	--	--	--	--	--	--	--	--	11
28...D	1215	9.7	206	5.0	1.7	4.3	2.6	15	0	12
28... A	1215	--	--	--	--	--	--	--	--	11
JAN.										
23...A	1045	--	--	--	--	--	--	--	--	--
MAR.										
21...B	1000	6.6	68	5.8	1.7	7.6	1.6	17	0	14
21...A	1000	--	--	--	--	--	--	--	--	15
21...C	1015	6.2	72	5.6	1.7	7.6	1.6	17	0	14
21...A	1015	--	--	--	--	--	--	--	--	16
21...D	1030	6.0	41	5.7	1.7	7.7	1.6	17	0	14
21...A	1030	--	--	--	--	--	--	--	--	16
APR.										
19...A	1150	--	--	--	--	--	--	--	--	--
MAY										
15...	0930	1.0	--	5.3	1.6	4.8	1.7	16	0	13
15...A	0930	--	--	--	--	--	--	19	0	16
JUNE										
19...A	1445	--	--	--	--	--	--	--	--	--

A Field analysis.
B Sample collected at quarter-point nearest left bank.
C Sample collected at midpoint of stream.
D Sample collected at quarter-point nearest right bank.

02053652 CHOWAN RIVER NEAR EDENHOUSE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.									
26... A	--	--	--	--	--	--	--	--	--
NOV.									
28... B	8.8	7.4	.1	--	.13	--	.020	76	49
28... A	--	--	--	--	--	--	--	--	--
28... C	6.8	6.8	.1	--	.29	--	.050	93	46
28... A	--	--	--	--	--	--	--	--	--
28... D	9.2	7.0	.1	--	.29	--	.060	80	47
28... A	--	--	--	--	--	--	--	--	--
JAN.									
23... A	--	--	--	--	--	--	--	--	--
MAR.									
21... B	7.8	11	.2	--	.50	--	.052	70	53
21... A	--	--	--	--	--	--	--	--	--
21... C	7.0	10	.2	--	.70	--	.074	65	51
21... A	--	--	--	--	--	--	--	--	--
21... D	5.2	11	.2	--	.50	--	.047	66	53
21... A	--	--	--	--	--	--	--	--	--
APR.									
19... A	--	--	--	--	--	--	--	--	--
MAY									
15...	7.2	5.4	.3	.2	--	.044	.040	57	35
15... A	--	--	--	--	--	--	--	--	--
JUNE									
19... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
26... A	--	--	--	--	--	41	6.4	15.0	18.0
NOV.									
28... B	.10	21	6	29	.4	72	6.1	--	--
28... A	--	--	--	--	--	78	6.2	12.5	17.0
28... C	.13	19	6	29	.4	71	6.2	--	--
28... A	--	--	--	--	--	78	6.2	12.5	17.0
28... D	.11	20	7	29	.4	71	6.2	--	--
28... A	--	--	--	--	--	78	6.2	12.5	17.0
JAN.									
23... A	--	--	--	--	--	100	6.8	6.5	14.5
MAR.									
21... B	.10	17	3	41	.7	81	6.3	--	--
21... A	--	--	--	--	--	90	6.1	12.0	8.5
21... C	.09	21	7	42	.7	80	6.4	--	--
21... A	--	--	--	--	--	90	6.4	12.0	8.5
21... D	.09	21	7	42	.7	80	6.4	--	--
21... A	--	--	--	--	--	90	6.2	12.0	8.5
APR.									
19... A	--	--	--	--	--	70	6.9	16.5	24.5
MAY									
15...	.08	20	7	32	.5	70	6.7	--	--
15... A	--	--	--	--	--	70	6.8	21.0	18.5
JUNE									
19... A	--	--	--	--	--	75	6.6	26.0	24.7

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.						
26... A	--	8.6	--	1	--	--
NOV.						
28... B	80	--	22	--	.03	--
28... C	80	--	16	--	.03	--
28... A	--	7.9	--	19	--	--
28... D	80	--	15	--	.03	--
JAN.						
23... A	--	12.8	--	2	--	--
MAR.						
21... B	80	--	14	--	.05	--
21... C	80	--	11	--	.00	--
21... A	--	10.6	--	4	--	--
21... D	80	--	11	--	.00	--
APR.						
19... A	--	9.4	--	2	--	--
MAY						
15...	80	--	5.1	--	.19	0
15... A	--	9.0	4.8	0	--	--
JUNE						
19... A	--	8.7	--	16	--	--

A Field analysis.
B Sample collected at quarter-point nearest left bank.
C Sample collected at midpoint of stream.
D Sample collected at quarter-point nearest right bank.

02070500 MAYO RIVER NEAR PRICE, N. C.

LOCATION.--Lat 36°32'02", long 79°59'31", Rockingham County, at Anglins Bridge on Secondary Road 1358, 300 ft upstream from gaging station, 0.5 mile downstream from confluence of North and South Mayo Rivers, 0.8 mile downstream from Virginia-North Carolina State line, and 4 miles west of Price.

DRAINAGE AREA.-- 260 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1949 to September 1950, water year 1969 (partial-record station), October 1969 to September 1973 (discontinued).
Water temperatures: October 1949 to September 1950.

EXTREMES.--1949-50:
Dissolved solids: Maximum, 57 mg/l Nov. 11-20, 1949; minimum, 36 mg/l May 11-20, 1950.
Hardness: Maximum, 19 mg/l Nov. 11-20, Dec. 1-10, 1949; minimum, 14 mg/l Mar. 21-30, May 1-10, 1950.
Water temperatures: Maximum, 26.0°C July 18, 1950; minimum, freezing point Dec. 17, 1949.

REMARKS.--Miscellaneous chemical data published for water years 1949, 1955-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
31...	1330	742	--	--	--	--	--	--	--	--
31...A	1330	742	--	--	--	--	--	--	--	--
NOV.										
22...	1500	445	13	0	3.4	1.3	2.3	1.0	16	0
22...A	1500	445	--	--	--	--	--	--	--	--
JAN.										
19...	1000	334	14	0	3.4	1.3	2.7	.9	18	0
19...A	1000	334	--	--	--	--	--	--	--	--
MAR.										
19...	1025	--	--	--	--	--	--	--	--	--
19...A	1025	--	--	--	--	--	--	--	--	--
APR.										
24...	1200	455	--	--	--	--	--	--	--	--
24...A	1200	455	--	--	--	--	--	--	--	--
MAY										
11...	1330	495	14	--	3.1	1.3	2.4	.9	17	0
11...A	1330	495	--	--	--	--	--	--	14	0
JUNE										
15...A	0930	354	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
31...	--	--	--	--	--	--	--	.031	--	--
31...A	--	--	--	--	--	--	--	--	--	--
NOV.										
22...	13	5.4	1.9	.0	--	.06	--	.000	35	37
22...A	13	--	--	--	--	--	--	--	--	--
JAN.										
19...	15	1.8	2.2	.1	--	.00	--	.044	34	35
19...A	20	--	--	--	--	--	--	--	--	--
MAR.										
19...	--	--	--	--	--	--	--	.042	--	--
19...A	--	--	--	--	--	--	--	--	--	--
APR.										
24...	--	--	--	--	--	--	--	.000	--	--
24...A	--	--	--	--	--	--	--	--	--	--
MAY										
11...	14	1.6	1.6	.3	.1	--	.002	.002	33	34
11...A	11	--	--	--	--	--	--	--	--	--
JUNE										
15...A	--	--	--	--	--	--	--	--	--	--

02070500 MAYO RIVER NEAR PRICE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.										
31...	--	--	--	--	--	--	--	--	--	--
31...A	--	--	--	--	--	--	45	7.1	12.5	20.5
NOV.										
22...	.05	42.1	14	1	25	.3	41	6.5	--	--
22...A	--	--	--	--	--	--	40	5.6	6.5	7.5
JAN.										
19...	.05	30.7	14	0	28	.3	43	6.3	--	--
19...A	--	--	--	--	--	--	40	6.6	7.5	13.5
MAR.										
19...	--	--	--	--	--	--	--	--	--	--
19...A	--	--	--	--	--	--	35	6.4	8.5	13.5
APR.										
24...	--	--	--	--	--	--	--	--	--	--
24...A	--	--	--	--	--	--	38	6.3	17.5	24.5
MAY										
11...	.04	44.1	13	0	27	.3	42	5.3	--	--
11...A	--	--	--	--	--	--	38	6.2	19.0	28.0
JUNE										
15...A	--	--	--	--	--	--	40	6.9	20.0	23.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.						
31...A	--	10.4	--	70	--	--
NOV.						
22...	5	--	3.1	--	.02	--
22...A	--	13.8	--	40	--	--
JAN.						
19...	5	--	14	--	.02	--
19...A	--	12.0	--	90	--	--
MAR.						
19...A	--	12.8	--	300	--	--
APR.						
24...A	--	11.4	--	100	--	--
MAY						
11...	5	--	14	--	.11	0
11...A	--	10.8	14	240	--	--
JUNE						
15...A	--	9.0	--	660	--	--

ROANOKE RIVER BASIN

02074002 SMITH RIVER NEAR EDEN, N. C.

LOCATION.--Lat 36°31'15", long 79°45'10", Rockingham County, at bridge on Secondary Road 1714 at Eden, 0.8 mile downstream from gaging station, 2.1 miles downstream from Stuart Creek, and 3.1 miles upstream from mouth.

DRAINAGE AREA.--539 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1949 to September 1950, water years 1968-69 (partial-record station), October 1969 to June 1973 (discontinued). Prior to October 1969, published as "near Spray".

EXTREMES.--1949-50:
Dissolved solids: Maximum, 57 mg/l Aug. 19, 1950; minimum, 46 mg/l Jan. 15, May 17, 1950.
Hardness: Maximum, 24 mg/l July 16, Aug. 19. Sept. 17, 1950; minimum, 18 mg/l May 17, 1950.

REMARKS.--Miscellaneous chemical data published for water years 1944, 1947-49, 1955-67. All data prior to October 1967 collected at gaging station 0.8 mile upstream and published as 02074000 Smith River at Spray.

02074002 SMITH RIVER NEAR EDEN, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
31...	1200	652	--	--	--	--	--	--	--	--
31...A	1200	652	--	--	--	--	--	--	--	--
NOV.										
22...	1315	1030	12	0	4.5	1.8	5.5	1.5	25	0
22...A	1315	1030	--	--	--	--	--	--	--	--
JAN.										
19...	1215	920	12	0	4.5	1.8	6.5	1.1	24	0
19...A	1215	920	--	--	--	--	--	--	--	--
MAR.										
16...	1010	896	--	--	--	--	--	--	--	--
16...A	1010	896	--	--	--	--	--	--	--	--
APR.										
24...	1030	1260	--	--	--	--	--	--	--	--
24...A	1030	1260	--	--	--	--	--	--	--	--
MAY										
11...	1145	1300	12	--	4.5	1.9	6.3	1.2	22	0
11...A	1145	1300	--	--	--	--	--	--	24	0
JUNE										
15...	1025	1390	--	--	--	--	--	--	--	--
15...A	1025	1390	--	--	--	--	--	--	--	--

DATE	AL-KA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
31...	--	--	--	--	--	--	--	.14	--	--
31...A	--	--	--	--	--	--	--	--	--	--
NOV.										
22...	21	4.6	6.8	.2	--	.20	--	.080	48	50
22...A	16	--	--	--	--	--	--	--	--	--
JAN.										
19...	20	4.2	7.4	.0	--	.20	--	.078	51	51
19...A	25	--	--	--	--	--	--	--	--	--
MAR.										
16...	--	--	--	--	--	--	--	.16	--	--
16...A	--	--	--	--	--	--	--	--	--	--
APR.										
24...	--	--	--	--	--	--	--	.051	--	--
24...A	--	--	--	--	--	--	--	--	--	--
MAY										
11...	18	4.8	5.1	.2	.2	--	.001	.060	49	47
11...A	20	--	--	--	--	--	--	--	--	--
JUNE										
15...	--	--	--	--	--	--	--	--	--	--
15...A	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.										
31...	--	--	--	--	--	--	--	--	--	--
31...A	--	--	--	--	--	--	120	6.9	12.5	19.0
NOV.										
22...	.07	133	20	0	36	.5	71	6.6	--	--
22...A	--	--	--	--	--	--	--	6.1	9.5	8.5
JAN.										
19...	.07	127	21	2	41	.7	76	6.2	--	--
19...A	--	--	--	--	--	--	88	6.0	7.0	11.8
MAR.										
16...	--	--	--	--	--	--	--	--	--	--
16...A	--	--	--	--	--	--	100	6.1	13.0	18.5
APR.										
24...	--	--	--	--	--	--	--	--	--	--
24...A	--	--	--	--	--	--	65	6.4	16.5	23.5
MAY										
11...	.07	172	19	1	40	.6	73	6.5	--	--
11...A	--	--	--	--	--	--	75	6.7	15.0	26.5
JUNE										
15...	--	--	--	--	--	--	--	--	--	--
15...A	--	--	--	--	--	--	95	6.9	18.5	20.3

02074002 SMITH RIVER NEAR EDEN, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)
OCT.								
31...	--	--	1.0	--	--	0	--	--
31...A	--	8.3	--	--	370	--	--	--
NOV.								
22...	5	--	--	10	--	0	.07	--
22...A	--	10.4	--	--	570	--	--	--
JAN.								
19...	10	--	--	24	--	0	.05	--
19...A	--	9.6	--	--	3700	--	--	--
MAR.								
18...	--	--	--	--	--	0	--	--
18...A	--	9.9	--	--	70	--	--	--
APR.								
24...	--	--	--	--	--	0	--	--
24...A	--	10.1	--	--	660	--	--	--
MAY								
11...	5	--	5.4	11	--	--	.11	0
11...A	--	10.3	--	7.7	520	--	--	--
JUNE								
15...	--	--	1.6	--	--	3	--	--
15...A	--	8.6	--	--	2000	--	--	--

ROANOKE RIVER BASIN

02074218 DAN RIVER NEAR MAYFIELD, N. C.

LOCATION.--Lat 36°32'29", long 79°36'21", Rockingham County, at bridge on Secondary Road 1761, at North Carolina-Virginia State line, 2.2 miles upstream from Whiteoak Creek, and 3 miles northwest of Mayfield.

DRAINAGE AREA.--1,780 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-70, 1973 (discontinued, partial-record station), October 1971 to September 1972.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
22...	1145	3900	10	39	4.2	1.7	7.1	1.8	20	0
22...A	1145	3900	--	--	--	--	--	--	--	--
JAN.										
19...	1330	2780	14	0	4.8	1.8	9.5	1.3	24	0
19...A	1330	2780	--	--	--	--	--	--	--	--
MAY										
11...	1015	--	13	--	4.1	1.8	6.5	1.4	21	0
11...A	1015	--	--	--	--	--	--	--	26	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NOV.										
22...	16	6.8	6.4	.1	--	.22	--	.050	63	51
22...A	14	--	--	--	--	--	--	--	--	--
JAN.										
19...	20	5.6	12	.0	--	.16	--	.068	63	62
19...A	21	--	--	--	--	--	--	--	--	--
MAY										
11...	17	4.8	6.2	.2	.2	--	.001	.060	51	48
11...A	21	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.										
22...	.09	663	18	1	44	.7	80	6.3	--	--
22...A	--	--	--	--	--	--	80	6.0	9.0	12.0
JAN.										
19...	.09	473	20	0	50	.9	96	6.5	--	--
19...A	--	--	--	--	--	--	100	6.8	7.7	13.5
MAY										
11...	.07	--	18	0	42	.7	73	6.4	--	--
11...A	--	--	--	--	--	--	70	6.5	17.5	26.0

02074218 DAN RIVER NEAR MAYFIELD, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)
NOV.					
22...	35	--	16	.06	--
22...A	--	12.3	--	--	--
JAN.					
19...	15	--	12	.08	--
19...A	--	12.4	--	--	--
MAY					
11...	30	--	13	.12	0
11...A	--	10.4	13	--	--

ROANOKE RIVER BASIN

02077200 HYCO CREEK NEAR LEASBURG, N. C.

LOCATION.--Lat 36°24'07", long 79°12'13", Caswell County, temperature recorder at gaging station on right bank 10 ft upstream from bridge on U.S. Highway 158, 1.5 miles upstream from Kilgore Creek, and 2.5 miles west of Leasburg.

DRAINAGE AREA.--44.0 sq mi.

PERIOD OF RECORD.--Water temperatures: May 1964 to September 1973. Prior to October 1967, published as "North Hyco".

EXTREMES.--1972-73:
Water temperatures: Maximum, 25.5°C July 10, 11; minimum, freezing point on several days during January.

Period of record:
Water temperatures: Maximum, 26.5°C June 22, 1964 and on several days during June and July 1969, July 23, 24, 25 1972; minimum, freezing point on several days during winter months in most years.

REMARKS.--Miscellaneous chemical data published for water years, 1959, 1965-67; 1959 data published as 02077202 North Hyco Creek near Leasburg.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	15.5	12.0	12.0	5.5	4.5	10.0	3.5	5.5	4.0	6.0	5.0
2	---	---	13.5	12.0	4.5	4.5	10.0	7.0	10.0	5.5	8.0	6.0
3	---	---	16.5	13.5	4.5	4.0	7.0	5.0	10.0	8.5	9.0	8.0
4	---	---	16.5	15.5	5.5	4.5	5.5	5.0	8.5	6.5	10.5	9.0
5	---	---	15.5	13.0	8.0	5.5	5.5	5.5	6.5	6.5	11.0	10.5
6	---	---	13.0	10.5	10.0	8.0	5.5	5.5	6.5	6.5	11.0	11.0
7	---	---	11.0	9.0	10.0	8.5	5.5	3.0	6.5	6.0	11.0	10.0
8	---	---	11.5	10.5	8.5	6.0	3.0	0.0	6.5	6.5	10.0	10.0
9	---	---	11.5	11.0	7.0	6.0	0.0	0.0	6.5	5.0	10.5	10.0
10	---	---	11.0	10.0	10.5	7.0	0.0	0.0	5.0	2.0	11.5	10.5
11	---	---	11.0	10.0	10.5	10.0	0.0	0.0	2.0	1.0	11.5	11.5
12	---	---	11.0	10.5	10.0	7.0	0.0	0.0	2.0	1.0	15.0	11.5
13	---	---	10.5	9.5	7.0	6.5	0.0	0.0	2.0	1.0	15.0	13.0
14	---	---	14.0	10.0	8.0	7.0	0.0	0.0	3.5	2.0	15.5	13.5
15	---	---	14.0	10.5	7.0	6.0	1.0	0.0	5.5	3.5	16.0	15.5
16	---	---	10.5	8.0	6.0	4.0	1.0	0.5	5.5	4.5	16.5	16.0
17	---	---	8.0	6.0	4.0	1.5	3.5	1.0	4.5	2.0	16.5	14.0
18	---	---	6.5	6.0	1.5	0.5	5.0	3.5	2.0	1.0	14.0	10.0
19	---	---	8.0	6.5	2.0	1.0	6.5	5.0	2.0	1.0	10.5	9.5
20	---	---	8.5	8.0	4.5	1.5	6.5	5.5	3.5	2.0	10.0	9.5
21	10.0	8.0	8.5	8.0	6.5	4.5	6.0	5.0	4.5	3.5	9.5	8.0
22	10.5	8.5	8.5	6.5	8.0	6.5	8.5	5.0	5.0	4.0	8.0	5.5
23	11.5	10.0	---	---	8.0	8.0	8.5	4.5	5.0	3.0	9.0	6.0
24	13.0	11.0	---	---	8.0	8.0	8.5	6.5	5.5	3.5	9.5	8.0
25	13.5	13.0	---	---	8.0	8.0	6.5	4.5	6.0	4.0	10.0	9.5
26	13.0	11.0	---	---	9.0	6.0	5.5	4.5	8.0	6.0	12.0	9.5
27	12.0	10.0	---	---	6.0	4.5	8.0	5.5	8.0	5.5	13.5	12.0
28	11.5	11.0	---	---	4.5	4.0	8.0	7.0	5.5	4.5	13.5	11.0
29	13.5	11.5	---	---	4.5	3.5	7.0	6.0	---	---	12.0	11.5
30	13.5	12.0	---	---	5.5	4.0	6.0	3.5	---	---	13.0	11.5
31	13.0	12.0	---	---	8.5	5.5	4.0	3.0	---	---	13.5	13.0
MONTH	---	---	---	---	10.5	0.5	10.0	0.0	10.0	1.0	16.5	5.0

02077200 HYCO CREEK NEAR LEASBURG, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.5	18.0	15.5	20.5	20.0	22.0	21.0	23.5	22.0	---	---
2	14.5	13.5	19.5	18.0	20.0	19.0	23.0	22.0	23.5	23.0	---	---
3	14.5	13.0	19.5	18.0	21.5	20.0	24.0	23.0	23.5	22.0	---	---
4	14.5	14.5	18.0	15.5	23.5	21.5	24.0	23.5	22.0	21.5	---	---
5	14.5	13.0	16.0	14.5	23.5	21.5	24.0	23.5	23.0	22.0	---	---
6	13.0	10.5	15.5	14.0	24.0	22.0	24.0	23.5	23.0	22.0	---	---
7	13.0	12.0	17.0	15.0	24.0	21.5	24.0	22.0	22.0	21.5	---	---
8	12.0	11.5	18.0	17.0	24.0	22.0	24.5	23.0	23.0	21.5	---	---
9	12.0	11.0	19.0	17.0	24.5	23.5	24.5	23.5	23.5	22.0	---	---
10	12.0	11.0	19.0	18.0	24.5	23.5	25.5	24.0	23.5	22.0	---	---
11	11.0	9.0	20.0	19.0	25.0	23.5	25.5	24.0	24.5	23.5	---	---
12	10.0	9.0	20.5	20.0	25.0	24.0	24.0	23.0	24.0	23.5	---	---
13	11.0	9.5	20.0	18.0	24.5	24.0	23.5	22.0	24.5	23.5	---	---
14	11.5	10.0	18.5	17.0	24.5	23.0	24.5	22.0	---	---	---	---
15	13.0	11.0	17.0	16.5	24.0	22.0	24.5	23.5	---	---	---	---
16	14.5	5.5	16.5	14.5	24.0	23.0	24.0	23.5	---	---	---	---
17	15.0	14.5	15.5	15.0	25.0	23.5	24.0	23.0	---	---	---	---
18	16.0	14.5	15.0	13.0	25.0	23.0	23.0	21.0	---	---	---	---
19	19.0	16.0	16.0	14.0	23.0	21.5	22.0	20.5	---	---	---	---
20	19.0	16.5	16.5	15.5	21.5	21.5	23.0	21.0	---	---	16.5	15.5
21	21.0	18.0	18.0	16.0	22.0	21.5	23.5	22.0	---	---	16.5	15.5
22	21.0	18.5	18.0	15.5	23.0	22.0	24.0	23.5	---	---	18.0	16.5
23	21.0	20.0	20.0	18.0	23.0	22.0	24.0	23.5	---	---	18.5	17.0
24	20.5	19.5	20.0	19.0	22.0	21.5	23.5	23.0	---	---	19.5	18.5
25	20.0	19.0	20.0	19.0	22.0	21.0	23.0	21.0	---	---	19.5	19.0
26	19.0	18.0	19.5	18.5	22.0	21.5	22.0	21.5	---	---	19.0	18.5
27	18.0	15.0	18.5	18.0	23.0	21.5	23.0	21.5	---	---	19.0	18.5
28	15.0	14.0	19.5	18.5	22.0	22.0	23.5	23.0	---	---	19.0	18.0
29	15.0	13.5	20.0	19.5	22.0	21.0	24.0	23.5	---	---	19.5	19.0
30	15.5	13.5	20.0	20.0	22.0	21.0	24.0	22.0	---	---	19.5	19.0
31	---	---	20.5	20.0	---	---	23.5	21.5	---	---	---	---
MONTH	21.0	5.5	20.5	13.0	25.0	19.0	25.5	20.5	---	---	---	---
YEAR	25.5	0.0										

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
DEC.				
15...	1404	634	267	457
16...	1107	612	107	177
16...	1215	598	109	176
FEB.				
02...	1402	733	322	637
02...	1530	884	242	578

ROANOKE RIVER BASIN

02077240 DOUBLE CREEK NEAR ROSEVILLE, N. C.

LOCATION.--Lat 36°21'44", long 79°05'48", Person County, temperature recorder at gaging station on left bank 75 ft downstream from bridge on Secondary Road 1166, 1.0 mile upstream from Mill Creek, and 3.0 miles northwest of Roseville.

DRAINAGE AREA.--7.47 sq mi.

PERIOD OF RECORD.--Water temperatures: May 1964 to April 1969, January 1970 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 25.0°C July 22, Aug. 11, 12, 13; minimum, 1.5°C on several days during January and February.

Period of record:
Water temperatures: Maximum, 29.5°C June 21, 22, 1964; minimum, freezing point on many days during most years.

REMARKS.--Miscellaneous chemical data published for water years 1966-67.

02077240 DOUBLE CREEK NEAR ROSEVILLE, N. C.--Continued

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO AUGUST 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	14.5	13.0	12.0	8.0	6.5	12.0	10.5	8.0	5.0	8.5	4.0
2	14.5	12.0	15.0	11.5	8.0	6.0	11.0	8.5	10.0	7.0	9.5	4.5
3	15.0	12.0	18.0	15.0	8.5	6.0	8.5	6.0	10.0	8.5	9.5	9.0
4	16.0	14.5	17.0	14.0	9.0	6.5	8.5	6.0	8.5	6.0	11.5	9.5
5	16.5	16.0	14.0	10.5	11.0	8.5	8.5	6.5	8.5	5.5	11.0	10.0
6	17.0	16.5	11.0	8.5	13.0	11.0	8.5	7.0	8.0	5.5	11.0	10.0
7	17.0	16.0	10.5	7.0	13.0	8.5	7.0	5.0	9.0	6.5	10.0	9.5
8	16.0	14.0	12.0	10.5	8.5	7.0	5.0	1.5	8.0	6.5	10.0	10.0
9	15.5	14.0	11.5	9.5	10.5	7.0	3.0	1.5	8.5	5.0	10.5	10.0
10	14.5	11.5	10.5	8.5	13.5	10.5	3.0	1.5	5.0	3.0	12.0	10.5
11	13.0	10.5	11.5	9.5	13.5	10.0	3.5	1.5	4.0	1.5	12.0	10.5
12	13.5	11.5	10.5	9.0	10.0	8.5	3.5	2.0	4.0	1.5	15.5	11.5
13	15.0	13.5	10.5	7.0	10.5	8.5	3.0	1.5	4.5	1.5	14.5	9.5
14	15.5	14.5	14.5	10.5	10.5	9.0	3.0	1.5	6.0	4.0	16.5	11.0
15	15.5	14.0	13.5	9.0	9.0	7.0	6.0	3.0	8.5	6.0	16.5	14.0
16	14.0	12.0	9.0	6.0	8.0	5.0	5.5	3.5	7.0	4.0	16.5	14.0
17	16.5	13.5	8.0	5.0	5.0	4.0	6.0	3.5	4.0	1.5	15.5	10.0
18	16.0	14.0	9.0	6.5	5.0	3.0	7.0	4.0	3.0	1.5	12.0	8.5
19	---	---	8.5	8.5	6.0	3.5	8.5	6.0	5.5	1.5	11.0	7.0
20	---	---	10.0	8.5	9.0	6.0	8.0	5.0	6.0	2.0	10.5	8.0
21	8.5	6.0	9.5	8.0	9.0	7.0	6.0	4.0	7.0	3.5	10.0	5.0
22	10.5	8.5	8.5	7.0	9.0	9.0	9.5	5.5	6.0	3.0	8.5	5.0
23	13.0	9.5	7.0	5.5	9.0	9.0	9.0	7.0	7.0	2.0	11.0	6.0
24	14.5	12.0	6.0	4.0	9.0	9.0	8.0	5.0	7.0	3.0	11.5	6.0
25	14.5	13.0	6.0	4.0	9.5	8.5	6.0	4.0	8.5	3.5	10.5	10.5
26	13.0	11.0	8.5	6.0	8.5	7.0	6.5	4.5	9.0	6.5	11.0	10.5
27	11.5	9.0	7.0	6.0	8.5	6.0	9.0	6.5	9.0	5.0	12.0	9.0
28	13.0	11.0	9.0	6.0	7.0	5.5	8.0	6.0	8.0	4.5	14.0	9.5
29	14.5	13.0	9.0	6.5	7.0	5.0	7.0	5.0	---	---	12.0	11.0
30	14.0	10.5	6.5	6.5	8.5	7.0	5.0	3.5	---	---	13.5	13.0
31	13.0	11.0	---	---	10.5	8.5	6.0	3.5	---	---	13.5	---
MONTH	17.0	6.0	18.0	4.0	13.5	3.0	12.0	1.5	10.0	1.5	16.5	4.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	13.5	13.5	14.0	19.0	16.5	22.0	20.5	24.0	22.0	---	---
2	14.5	11.5	19.0	15.5	20.0	16.0	23.0	21.5	24.0	23.0	---	---
3	15.5	10.0	17.0	16.0	20.5	17.0	23.5	21.0	24.0	23.0	---	---
4	14.5	13.0	16.5	13.0	21.5	19.0	23.5	21.5	23.5	22.0	---	---
5	13.5	10.5	15.5	11.0	21.0	19.0	23.0	21.0	23.5	21.5	---	---
6	15.0	8.5	15.5	10.5	22.0	20.0	23.0	21.0	23.5	21.5	---	---
7	13.0	11.0	18.0	13.5	21.0	19.5	23.0	20.0	23.5	21.0	---	---
8	11.5	11.5	16.5	15.5	22.0	19.5	23.5	20.5	23.5	21.0	---	---
9	13.0	10.5	19.0	16.0	22.0	20.0	23.5	21.5	24.0	21.5	---	---
10	13.0	10.0	19.0	14.5	22.0	20.0	24.0	21.5	24.0	21.5	---	---
11	12.0	9.5	20.5	16.5	23.0	20.5	24.0	22.0	25.0	23.0	---	---
12	11.0	7.0	19.0	16.0	22.0	20.0	23.0	20.5	25.0	23.5	---	---
13	13.5	8.0	17.0	14.5	22.0	21.0	23.0	19.0	25.0	23.0	---	---
14	14.5	7.0	16.5	13.5	21.5	19.5	23.5	20.5	24.5	23.0	---	---
15	15.5	8.0	16.0	14.5	21.0	19.0	23.5	21.5	24.5	23.0	---	---
16	16.5	9.5	15.5	11.0	22.0	20.5	23.0	21.5	24.0	22.0	---	---
17	15.0	12.0	14.5	12.0	23.5	20.5	23.0	21.0	23.0	22.0	---	---
18	16.5	13.0	14.5	10.5	22.0	21.0	21.5	19.0	23.0	23.0	---	---
19	19.0	14.0	16.0	13.0	21.0	20.0	21.5	19.0	23.0	21.5	---	---
20	19.5	13.5	16.5	15.0	20.0	19.5	23.0	20.0	21.5	21.0	---	---
21	20.5	15.0	17.0	14.0	22.0	20.0	24.0	21.0	---	---	---	---
22	21.0	15.0	17.0	13.0	22.0	21.0	25.0	22.0	---	---	---	---
23	19.5	16.0	19.0	16.5	22.0	21.0	24.0	23.0	---	---	---	---
24	19.5	15.5	18.5	16.5	21.5	20.0	23.5	22.0	---	---	---	---
25	19.0	15.5	18.0	16.5	21.0	18.0	23.0	20.5	---	---	---	---
26	17.0	15.0	17.0	15.5	21.5	19.5	23.0	21.0	---	---	---	---
27	15.5	14.0	17.0	15.5	21.5	20.0	24.0	21.5	---	---	---	---
28	15.0	13.0	19.5	17.0	21.5	20.5	24.0	23.0	---	---	---	---
29	15.5	10.0	19.5	18.5	22.0	21.0	24.5	23.0	---	---	---	---
30	16.5	11.0	20.0	18.0	22.0	19.5	24.0	21.5	---	---	---	---
31	---	---	19.5	16.5	---	---	24.0	22.0	---	---	---	---
MONTH	21.0	7.0	20.5	10.5	23.5	16.0	25.0	19.0	---	---	---	---
YEAR	25.0	1.5										

02077240 DOUBLE CREEK NEAR ROSEVILLE, N. C.--Continued

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
DEC.				
15...	1310	1390	1580	5930
15...	1653	320	414	358
FEB.				
02...	1325	354	672	642
02...	1600	158	400	171

ROANOKE RIVER BASIN

02077250 SOUTH HYCO CREEK NEAR ROSEVILLE, N. C.

LOCATION.--Lat 36°23'12", long 79°06'22", Person County, temperature recorder at gaging station on right bank at downstream side of bridge on U.S. Highway 158, 1.2 miles downstream from Double Creek, and 4.2 miles northwest of Roseville.

DRAINAGE AREA.--55 sq mi, approximately.

PERIOD OF RECORD.--Water temperatures: January 1967 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 26.0°C July 11, 22, 23, Aug. 11, 12, 13; minimum, freezing point on several days during January and February.

Period of record:
Water temperatures: Maximum, 30.5°C Aug. 22, 1968; minimum, freezing point on many days in January and February 1968 and 1973.

REMARKS.--Miscellaneous chemical data published for water years 1966-67.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.0	19.5	14.0	14.0	6.5	5.5	11.0	9.5	5.5	4.0	6.5	4.0
2	19.5	17.0	16.0	14.0	6.5	5.5	11.0	9.5	9.0	5.5	8.0	5.0
3	18.5	17.0	19.5	16.0	6.5	5.0	8.5	5.5	9.0	7.0	9.0	8.0
4	19.5	18.5	19.5	18.0	7.0	5.5	6.5	5.5	7.0	5.0	10.5	9.0
5	19.5	19.5	19.0	15.0	9.5	7.0	6.5	6.0	7.0	5.0	10.5	10.5
6	20.0	19.5	15.0	12.0	11.0	9.5	6.5	6.5	6.5	5.0	10.5	10.0
7	20.0	20.0	13.0	10.5	11.0	9.5	6.5	4.0	8.0	5.5	10.0	9.5
8	20.0	18.0	15.0	13.0	8.5	6.5	4.0	0.5	7.0	6.0	9.5	9.0
9	19.0	18.0	15.0	13.0	9.0	6.5	0.5	0.0	6.5	4.5	10.0	9.5
10	19.5	15.5	14.0	11.5	11.5	9.0	0.0	0.0	4.5	1.5	11.0	10.0
11	16.0	14.5	14.0	13.0	11.5	10.0	0.0	0.0	3.0	0.0	11.0	10.5
12	16.0	15.0	14.0	13.0	10.0	8.0	0.5	0.0	1.5	0.0	14.5	11.0
13	17.0	16.0	13.0	11.0	9.0	7.0	0.5	0.0	3.0	0.0	14.5	11.0
14	18.5	17.0	16.0	13.0	9.0	4.0	0.5	0.0	4.0	2.0	15.5	11.5
15	19.0	18.0	16.0	13.0	8.0	6.5	2.0	0.5	6.5	4.0	15.5	14.5
16	18.0	16.5	13.0	9.5	6.5	4.5	3.0	1.5	6.5	4.5	16.0	15.0
17	18.5	16.5	9.5	8.0	4.5	2.0	4.0	2.0	4.5	0.0	16.0	13.0
18	18.5	16.5	9.5	8.5	2.0	1.5	5.0	3.5	1.5	0.0	13.0	9.0
19	16.5	14.0	10.0	9.5	4.0	2.0	6.5	5.0	3.0	0.0	11.0	8.5
20	14.5	11.0	11.0	10.0	7.0	4.0	6.5	4.5	3.5	1.5	10.0	9.5
21	11.0	9.5	11.0	10.5	7.0	6.5	5.0	4.0	4.5	3.0	9.5	5.5
22	13.0	10.5	10.5	9.0	8.5	8.0	8.0	4.5	5.0	3.0	8.0	5.0
23	14.0	12.0	9.5	7.0	8.5	8.5	8.0	6.5	5.0	2.0	9.5	5.5
24	15.5	14.0	7.0	6.0	8.5	9.5	8.0	5.5	5.5	3.5	10.5	6.5
25	15.5	15.5	6.5	6.0	8.5	8.5	5.5	3.5	6.5	4.0	10.0	8.5
26	15.5	14.0	9.5	6.5	8.5	6.5	5.0	4.0	8.0	6.5	11.5	9.5
27	14.5	12.0	9.5	8.5	6.5	5.5	7.0	5.0	8.0	4.5	11.5	11.0
28	14.0	13.5	10.5	8.5	5.5	4.5	7.0	5.5	6.5	4.0	13.5	10.5
29	15.5	14.0	10.5	6.5	5.5	4.5	6.0	5.0	---	---	13.5	10.5
30	15.5	14.0	6.5	6.0	6.5	5.0	5.0	2.0	---	---	13.0	12.0
31	14.5	13.5	---	---	9.5	6.5	4.0	2.0	---	---	13.5	13.0
MONTH	22.0	9.5	19.5	6.0	11.5	1.5	11.0	0.0	9.0	0.0	16.0	4.0

02077250 SOUTH HYCO CREEK NEAR ROSEVILLE, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	13.5	18.0	15.5	20.5	19.5	23.5	22.0	25.0	23.5	25.0	23.5
2	14.5	13.0	19.0	17.0	21.0	19.5	24.0	22.0	24.5	23.5	25.0	23.5
3	15.5	11.0	19.0	17.0	23.0	20.0	24.5	23.0	24.0	23.5	25.5	24.5
4	15.5	14.0	17.0	14.5	24.5	21.5	24.5	23.5	24.0	23.0	25.0	24.5
5	14.5	12.0	16.5	13.5	23.5	21.5	24.5	23.5	24.5	23.5	25.0	23.5
6	14.0	9.5	15.0	13.5	24.5	22.0	25.0	23.5	24.5	23.0	24.5	23.5
7	14.0	12.0	17.0	14.5	24.0	22.0	25.0	22.0	24.5	22.0	25.0	24.0
8	12.0	11.5	18.0	17.0	24.5	22.0	25.0	23.0	25.0	23.0	25.0	24.0
9	12.0	11.0	20.0	17.0	25.0	23.0	25.0	23.5	25.5	23.0	24.5	24.0
10	12.0	11.0	20.0	16.5	25.0	23.0	25.5	24.0	25.5	23.0	24.0	21.5
11	11.0	8.5	20.5	19.0	25.0	23.0	26.0	24.0	26.0	24.5	21.5	19.5
12	11.0	8.0	20.5	19.5	25.0	23.0	24.0	23.0	26.0	24.5	20.5	19.5
13	13.0	9.0	20.0	17.0	24.5	23.5	24.0	21.5	26.0	24.5	20.5	20.0
14	13.0	9.0	18.5	16.5	24.5	22.0	25.0	22.0	25.5	24.5	21.0	20.5
15	14.0	9.5	17.0	16.5	23.5	21.5	25.0	24.0	25.5	24.5	21.0	20.5
16	15.0	11.5	16.5	14.5	24.0	22.0	24.5	24.0	25.0	23.0	21.0	20.5
17	15.0	14.0	16.0	14.5	25.5	23.0	24.5	23.0	24.5	23.5	21.0	20.0
18	16.0	14.0	15.5	13.0	24.5	23.0	23.5	21.0	24.0	23.0	20.5	20.0
19	18.5	15.5	16.5	14.5	23.0	21.5	23.5	21.0	23.0	22.0	20.5	18.5
20	19.0	16.0	17.0	16.5	21.5	21.0	24.5	21.5	22.0	21.5	19.0	18.0
21	21.0	18.0	18.5	16.0	23.5	21.5	25.0	23.0	22.0	21.5	19.0	18.0
22	21.0	18.0	18.5	16.0	23.5	23.0	26.0	24.0	22.0	21.5	19.5	18.5
23	20.5	19.0	20.0	18.5	23.5	23.0	26.0	24.5	22.0	21.0	20.5	19.0
24	20.0	18.5	20.0	19.0	23.5	22.0	25.0	24.0	21.0	20.5	21.0	20.0
25	20.0	18.5	19.5	19.0	23.5	21.5	24.5	22.0	22.0	20.5	21.0	21.0
26	18.5	16.5	19.0	18.0	24.0	21.5	24.0	23.0	23.0	21.0	21.0	20.0
27	17.0	15.0	18.5	18.0	23.5	22.0	25.0	23.0	23.5	21.5	21.0	20.0
28	15.5	13.5	20.0	18.5	23.0	23.0	25.0	24.0	24.0	22.0	21.0	19.5
29	15.5	11.5	20.5	20.0	23.0	22.0	25.5	24.5	25.0	23.0	21.5	20.5
30	15.5	13.0	21.0	20.0	23.0	21.5	25.5	23.5	25.0	23.5	21.5	20.0
31	---	---	21.0	20.0	---	---	25.0	24.0	25.0	23.5	---	---
MONTH	21.0	9.0	21.0	13.0	25.5	19.5	26.0	21.0	26.0	20.5	25.5	18.0
YEAR	26.0	0.0										

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
DEC.				
15...	1335	1730	582	2720
16...	1030	884	69	165
FEB.				
02...	1340	2260	246	1500
02...	1545	2690	463	3360

ROANOKE RIVER BASIN

02077300 HYCO RIVER AT McGEHEES MILL, N. C.
(Radiochemical station)

LOCATION.--Lat 36°31'02", long 79°01'42", Person County, temperature recorder at gaging station on left bank 200 ft downstream from bridge on Secondary Road 1322, at McGehees Mill, and 1.7 miles downstream from Hyco Dam.

DRAINAGE AREA.--191 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-69, 1973 (discontinued, partial-record station), October 1969 to September 1972.
Water temperatures: August 1964 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum recorded, 34.0°C July 8; minimum recorded, 8.0°C Feb. 12, 17, 18, 19.

Period of record:
Water temperatures: Maximum, 35.0°C June 7, 28, 1971; minimum, freezing point Jan. 29-31 and Feb. 1, 1966.

REMARKS.--Miscellaneous chemical data published for 1965-67.

02077300 HYCO RIVER AT McGEHEES MILL, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
31...	0900	84	--	--	--	--	--	--	--	--
31... A	0900	84	--	--	--	--	--	--	--	--
NOV.										
22...	0900	1040	13	[illegible]	9.2	3.4	5.6	2.0	40	0
22... A	0900	1040	--	--	--	--	--	--	--	--
JAN.										
19...	1530	201	7.2	[illegible]	7.4	2.8	4.5	1.5	28	0
19... A	1530	201	--	--	--	--	--	--	--	--
FEB.										
02... A	1500	2660	--	--	--	--	--	--	--	--
MAR.										
19...	1320	386	--	--	--	--	--	--	--	--
19... A	1320	386	--	--	--	--	--	--	--	--
APR.										
24...	0800	268	--	--	--	--	--	--	--	--
24... A	0800	268	--	--	--	--	--	--	--	--
MAY										
11...	0730	--	14	--	7.2	2.9	5.2	1.4	27	0
11... A	0730	--	--	--	--	--	--	--	32	0
JUNE										
15... A	1330	--	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
31...	--	--	--	--	--	--	--	.021	--	--
31... A	--	--	--	--	--	--	--	--	--	--
NOV.										
22...	33	11	5.4	.4	--	.09	--	.000	72	71
22... A	36	--	--	--	--	--	--	--	--	--
JAN.										
19...	23	12	4.4	.1	--	.07	--	.034	68	54
19... A	21	--	--	--	--	--	--	--	--	--
FEB.										
02... A	--	--	--	--	--	--	--	--	--	--
MAR.										
19...	--	--	--	--	--	--	--	.049	--	--
19... A	--	--	--	--	--	--	--	--	--	--
APR.										
24...	--	--	--	--	--	--	--	.26	--	--
24... A	--	--	--	--	--	--	--	--	--	--
MAY										
11...	22	13	4.0	.3	.4	--	.003	.020	61	61
11... A	25	--	--	--	--	--	--	--	--	--
JUNE										
15... A	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIU	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.										
31...	--	--	--	--	--	--	--	--	--	--
31... A	--	--	--	--	--	--	120	6.6	16.5	15.0
NOV.										
22...	.10	202	37	4	24	.4	110	7.1	--	--
22... A	--	--	--	--	--	--	105	6.0	14.0	4.0
JAN.										
19...	.09	36.9	30	7	24	.4	90	6.8	--	--
19... A	--	--	--	--	--	--	95	7.1	12.5	16.5
FEB.										
02... A	--	--	--	--	--	--	--	--	--	--
MAR.										
19...	--	--	--	--	--	--	--	--	--	--
19... A	--	--	--	--	--	--	80	6.7	15.0	16.0
APR.										
24...	--	--	--	--	--	--	--	--	--	--
24... A	--	--	--	--	--	--	90	6.2	21.5	22.5
MAY										
11...	.08	--	30	8	26	.4	93	6.6	--	--
11... A	--	--	--	--	--	--	95	6.1	23.0	25.5
JUNE										
15... A	--	--	--	--	--	--	100	6.5	24.0	27.0

02077300 HYCO RIVER AT McGEHEES MILL, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	TOTAL ALPHA (PC/L)	TOTAL ALPHA (COUNTING ERROR)	DISSOLVED ALPHA (PC/L)	DISSOLVED ALPHA (COUNTING ERROR)
OCT.										
31...	--	--	--	--	--	--	.1	.5	.0	.5
31... A	--	8.5	--	10	--	--	--	--	--	--
NOV.										
22...	5	--	5.1	--	.05	--	.3	.5	.0	.5
22... A	--	8.1	--	0	--	--	--	--	--	--
JAN.										
19...	5	--	7.1	--	.07	--	.4	.4	.0	.3
19... A	--	11.5	--	0	--	--	--	--	--	--
MAR.										
19...	--	--	--	--	--	--	.8	.5	.6	.5
19... A	--	10.8	--	2	--	--	--	--	--	--
APR.										
24...	--	--	--	--	--	--	.1	1.0	.0	1.0
24... A	--	9.5	--	12	--	--	--	--	--	--
MAY										
11...	50	--	11	--	.12	30	.8	1.5	.6	1.5
11... A	--	9.2	41	100	--	--	--	--	--	--
JUNE										
15...	--	--	--	--	--	--	.7	.5	.0	.3
15... A	--	7.2	--	64	--	--	--	--	--	--

DATE	SUSPENDED ALPHA (PC/L)	SUSPENDED ALPHA (COUNTING ERROR)	TOTAL BETA (PC/L)	TOTAL BETA (COUNTING ERROR)	DISSOLVED BETA (PC/L)	DISSOLVED BETA (COUNTING ERROR)	SUSPENDED BETA (PC/L)	SUSPENDED BETA (COUNTING ERROR)	TOTAL STRONTIUM 89 (PC/L)	TOTAL STRONTIUM 90 (PC/L)
OCT.										
31...	.1	.2	3.3	.5	3.2	.5	.2	.2	<5.0	<1.0
31... A	--	--	--	--	--	--	--	--	--	--
NOV.										
22...	.3	.2	2.8	.4	2.4	.4	.0	.2	<5.0	<1.0
22... A	--	--	--	--	--	--	--	--	--	--
JAN.										
19...	.4	.2	2.7	.5	2.5	.4	.2	.2	<5.0	<1.0
19... A	--	--	--	--	--	--	--	--	--	--
MAR.										
19...	.1	.2	2.1	.5	2.1	.4	.0	.2	<5.0	<1.0
19... A	--	--	--	--	--	--	--	--	--	--
APR.										
24...	.1	.2	3.1	.5	2.6	.4	.5	.3	<5.0	<1.0
24... A	--	--	--	--	--	--	--	--	--	--
MAY										
11...	.2	.2	2.3	.5	2.1	.4	.2	.2	<5.0	<1.0
11... A	--	--	--	--	--	--	--	--	--	--
JUNE										
15...	.7	.4	3.5	.5	1.9	.4	1.6	.4	<5.0	<1.0
15... A	--	--	--	--	--	--	--	--	--	--

02077300 HYCO RIVER AT McGEHEES MILL, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	18.5	17.0	16.5	11.0	11.0	12.0	11.0	10.0	10.0	10.5	9.0
2	24.0	18.5	19.5	16.5	11.0	11.0	12.0	12.0	10.0	10.0	12.0	9.5
3	24.5	20.5	21.0	19.5	12.0	11.0	12.0	11.5	10.5	10.0	12.0	11.5
4	24.5	21.5	20.0	19.0	13.0	11.5	11.5	10.5	10.5	10.0	12.0	11.0
5	23.0	18.0	19.0	16.5	14.0	13.0	10.5	10.5	10.5	10.0	13.0	11.5
6	22.0	22.0	18.0	15.0	14.5	14.0	10.5	10.5	10.5	10.0	11.5	10.0
7	22.0	22.0	17.0	15.0	14.0	13.0	10.5	10.0	10.5	10.0	10.5	10.0
8	22.0	21.5	17.0	16.0	13.0	12.0	10.0	9.0	10.0	10.0	11.5	10.5
9	22.0	21.0	17.0	16.5	12.0	12.0	9.5	9.0	10.0	9.0	12.0	11.5
10	21.0	20.0	17.0	16.0	13.5	12.0	9.0	9.0	9.0	9.5	12.0	11.5
11	22.0	19.5	18.0	16.0	13.5	13.0	9.5	9.0	9.0	9.5	12.0	11.0
12	21.0	19.5	18.0	16.0	13.0	11.5	9.0	9.0	9.0	9.0	14.5	12.0
13	23.0	20.0	17.0	15.5	13.0	11.5	9.0	9.0	9.0	9.5	15.0	13.5
14	22.0	20.0	18.0	16.5	12.0	11.5	9.0	9.5	9.5	8.5	16.5	14.5
15	23.0	19.5	17.0	16.0	11.5	11.0	9.0	9.0	9.0	8.5	16.5	15.5
16	19.5	18.5	16.0	15.5	11.0	11.0	10.0	8.5	9.0	9.5	17.0	16.0
17	23.0	19.0	15.5	14.5	11.0	11.0	10.5	9.0	9.0	9.0	16.5	14.5
18	20.0	18.5	15.0	14.5	11.0	10.0	11.0	9.5	9.0	9.0	14.5	13.5
19	18.5	15.5	15.0	14.5	10.0	10.0	11.0	10.5	9.5	8.0	14.5	13.5
20	17.0	14.5	14.5	14.0	10.5	10.0	11.5	10.0	10.0	8.5	14.0	13.0
21	18.0	14.5	14.5	14.5	10.5	10.0	10.5	9.5	10.5	9.0	13.5	11.0
22	19.5	16.0	14.5	14.0	10.5	10.5	11.0	10.0	10.0	9.5	13.0	11.0
23	19.0	16.5	14.0	13.5	10.5	10.5	10.5	10.0	10.0	9.0	13.0	11.5
24	19.5	18.0	13.5	13.0	10.5	10.5	10.5	10.0	11.0	9.0	14.0	12.0
25	19.0	17.0	13.0	11.5	10.5	10.5	11.0	10.0	11.0	9.0	13.5	13.0
26	18.5	15.5	12.0	11.5	11.0	10.5	11.0	10.0	11.5	10.0	15.0	13.5
27	17.0	15.5	12.0	12.0	11.0	11.0	11.0	10.5	10.0	9.0	15.0	14.5
28	16.5	16.0	12.0	11.5	11.5	11.0	11.0	10.5	10.0	9.0	15.5	14.0
29	19.0	15.5	12.0	11.5	11.0	10.5	11.0	10.5	---	---	15.5	14.0
30	19.0	15.5	11.5	11.0	11.0	11.0	10.5	10.0	---	---	16.0	14.5
31	18.0	16.5	---	---	11.0	11.0	10.5	10.0	---	---	16.5	15.5
MONTH	24.5	14.5	21.0	11.0	14.5	10.0	12.0	8.5	11.5	9.0	17.0	9.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	16.0	21.5	19.5	25.5	20.5	31.5	29.0	29.5	24.0	32.0	30.0
2	17.0	16.0	22.0	20.5	20.5	19.5	32.0	28.5	29.0	26.0	32.0	30.0
3	17.0	16.0	21.5	19.0	23.0	19.5	31.5	30.0	28.5	24.5	32.0	30.5
4	17.0	16.0	21.0	20.0	29.0	21.0	32.0	30.0	30.0	23.5	31.5	30.0
5	16.0	15.5	20.5	20.0	28.0	25.5	31.5	29.5	30.5	26.5	31.0	29.0
6	18.0	15.0	20.5	18.0	27.0	25.5	31.5	30.0	29.5	26.0	30.5	29.0
7	16.0	15.5	25.5	15.5	28.5	25.5	32.0	29.5	30.5	25.5	30.5	29.5
8	15.5	15.0	23.0	20.5	29.0	26.0	34.0	29.5	32.0	25.5	30.5	29.0
9	15.5	15.0	22.0	20.5	29.0	26.5	33.5	30.0	33.0	26.5	30.0	29.0
10	15.0	14.0	23.5	20.0	29.5	26.0	33.5	31.0	33.0	27.0	29.0	27.0
11	14.5	14.0	23.5	21.5	29.5	26.5	33.5	29.0	33.5	28.5	28.0	26.0
12	14.0	13.5	23.0	21.5	28.5	26.0	33.0	29.5	33.0	28.0	28.5	25.5
13	15.0	13.0	23.0	21.0	28.0	25.5	32.0	29.0	33.5	27.0	28.0	25.0
14	16.0	13.5	23.0	20.5	26.0	25.0	33.0	29.5	31.0	27.0	27.0	25.0
15	18.0	14.5	22.0	21.0	26.5	23.5	32.0	30.0	31.5	26.5	26.0	24.0
16	13.5	16.5	21.5	19.5	29.0	24.5	32.0	29.5	31.5	25.5	28.5	24.5
17	18.0	17.0	21.5	20.0	32.0	25.0	31.0	27.0	29.5	26.5	26.5	24.0
18	18.5	17.0	21.0	19.0	28.0	24.5	31.5	24.5	28.5	22.0	26.5	24.0
19	19.5	18.5	21.0	19.0	27.0	23.5	31.0	26.0	29.5	26.0	25.0	21.0
20	21.0	19.0	21.0	19.5	27.0	25.0	31.0	26.5	29.0	26.5	26.0	20.5
21	23.5	19.5	19.5	18.0	30.0	25.5	31.5	26.5	29.5	26.5	25.5	21.0
22	23.0	21.0	23.0	18.0	29.0	26.5	32.0	28.5	29.0	26.0	26.0	22.0
23	22.0	21.0	24.0	21.0	29.5	25.5	30.0	27.0	27.0	25.5	28.0	22.0
24	23.0	21.0	23.0	21.5	30.0	24.0	30.0	25.5	28.0	26.0	27.0	24.0
25	22.0	20.5	23.0	21.5	31.0	26.0	29.0	25.5	29.0	26.5	25.5	23.0
26	21.0	20.0	21.5	20.5	30.5	28.5	28.0	25.5	29.5	26.5	23.0	21.0
27	20.0	18.0	21.0	20.5	30.5	28.5	30.5	26.0	30.5	27.0	25.0	21.0
28	19.0	18.0	22.0	20.0	30.0	28.0	31.5	27.0	30.5	28.5	27.0	21.5
29	19.5	18.0	23.5	21.5	31.0	28.5	32.0	27.0	31.0	29.5	27.0	23.5
30	20.0	18.5	24.5	23.0	31.0	28.0	31.5	27.0	31.0	29.5	26.0	21.5
31	---	---	25.5	23.0	---	---	30.0	25.5	31.5	30.0	---	---
MONTH	23.5	13.0	25.5	15.5	32.0	19.5	34.0	24.5	33.5	22.0	32.0	20.5
YEAR	34.0	8.0										

02080482 ROANOKE RIVER NEAR ROANOKE RAPIDS, N. C.

LOCATION.--Lat 36°29'10", long 77°37'40", Halifax County, at bridge on State Highway 48 at Roanoke Rapids, 1.2 miles upstream from gaging station, 1.6 miles downstream from Roanoke Rapids Dam, and 3.7 miles upstream from Chockoyotte Creek.

DRAINAGE AREA.--8,410 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1948 to September 1949, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1948 to September 1949.

EXTREMES.--1948-49:
Dissolved solids: Maximum, 74 mg/l Nov. 11-20, 1948; minimum, 46 mg/l Dec. 1-10, 1948, Jan. 1-10, 1949.
Hardness: Maximum, 34 mg/l Oct. 21-31, 1948; minimum, 20 mg/l Jan. 1-10, 1949.
Water temperatures: Maximum, 32.5°C July 30, 1949; minimum, 3.0°C Dec. 27, 1948.

REMARKS.--Miscellaneous chemical data collected at described site and/or at gaging station 1.2 miles downstream are published for water years 1946-47, 1955-67. Records of discharge are given for 02080500 Roanoke River at Roanoke Rapids.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
12...	1130	19100	10	125	6.2	3.0	6.0	2.0	31	0
12...A	1130	19100	--	--	--	--	--	--	--	--
MAR.										
13...	1115	19200	8.1	0	5.9	2.3	5.2	1.7	26	0
13...A	1115	19200	--	--	--	--	--	--	--	--
MAY										
07...	1130	19600	9.0	--	6.4	2.6	5.2	2.1	27	0
07...A	1130	19600	--	--	--	--	--	--	30	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
12...	25	7.0	6.6	.1	--	.30	--	.013	62	58
12...A	26	--	--	--	--	--	--	--	--	--
MAR.										
13...	21	8.0	5.4	.1	--	.32	--	.000	60	51
13...A	25	--	--	--	--	--	--	--	--	--
MAY										
07...	22	8.0	4.1	.2	.1	--	.007	.020	55	51
07...A	25	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
12...	.08	3200	28	3	30	.5	87	7.0	--	--
12...A	--	--	--	--	--	--	90	6.4	10.0	6.0
MAR.										
13...	.07	3110	24	3	30	.5	75	6.8	--	--
13...A	--	--	--	--	--	--	85	6.8	9.0	19.5
MAY										
07...	.07	2910	27	5	28	.4	83	6.4	--	--
07...A	--	--	--	--	--	--	85	6.6	16.5	23.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
12...	20	--	5.0	.04	--
12...A	--	10.0	--	--	--
MAR.					
13...	25	--	6.6	.00	--
13...A	--	7.2	--	--	--
MAY					
07...	20	--	17	.10	30
07...A	--	10.2	12	--	--

02081000 ROANOKE RIVER NEAR SCOTLAND NECK, N. C.

LOCATION.--Lat 36°12'33", long 77°13'02", Halifax County, at bridge on U.S. Highway 258, 3 miles downstream from Bridgers Creek, 5.8 miles north of Scotland Neck, and at mile 102.5.

DRAINAGE AREA.--8,700 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1944 to September 1945, October 1953 to September 1954, water years 1968-73 (partial-record station).

EXTREMES.--1944-45, 1953-54:
Dissolved solids: Maximum, 173 mg/l Apr. 1-10, 1945; minimum, 47 mg/l Oct. 1-10, 1944.
Hardness: Maximum, 57 mg/l Apr. 1-10, 1945; minimum, 18 mg/l Oct. 1-10, 1944.
Water temperatures: Maximum, 29.5°C July 3, 4, 6, 7, 8, 1945; minimum, 0.5°C Dec. 31, 1953.

REMARKS.--Miscellaneous chemical data published for water years 1947, 1949, 1952, 1955-56, 1960-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
12...	1230	19000	10	125	5.6	3.5	6.4	2.1	34	0
12...A	1230	19000	--	--	--	--	--	--	--	--
MAR.										
13...	1320	11300	7.5	0	6.2	2.2	6.3	1.7	28	0
13...A	1320	11300	--	--	--	--	--	--	--	--
MAY										
07...	1300	19900	9.0	--	6.1	2.6	5.3	1.7	26	0
07...A	1300	19900	--	--	--	--	--	--	30	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
12...	28	8.0	6.2	.4	--	.30	--	.010	62	61
12... A	34	--	--	--	--	--	--	--	--	--
MAR.										
13...	23	8.2	5.6	.3	--	.27	--	.000	66	53
13... A	26	--	--	--	--	--	--	--	--	--
MAY										
07...	21	8.0	5.2	.2	.2	--	.005	.030	56	52
07... A	25	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
12...	.08	3160	29	1	31	.5	91	6.9	--	--
12...A	--	--	--	--	--	--	95	6.3	11.0	7.5
MAR.										
13...	.09	2010	25	4	34	.6	80	6.7	--	--
13...A	--	--	--	--	--	--	90	6.6	11.0	23.5
MAY										
07...	.08	3010	26	5	29	.5	84	6.5	--	--
07...A	--	--	--	--	--	--	70	6.3	17.5	25.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
12...	20	--	6.8	.04	--
12... A	--	9.6	--	--	--
MAR.					
13...	40	--	8.9	.00	--
13... A	--	8.4	--	--	--
MAY					
07...	10	--	13	.11	30
07... A	--	9.6	24	--	--

02081022 ROANOKE RIVER NEAR OAK CITY, N. C.

LOCATION.--Lat 36°01'49", long 77°15'49", Martin County, at bridge on State Highway 11, 1.9 miles downstream from Klans Gut, and 5.2 miles northeast of Oak City.

DRAINAGE AREA.--8,830 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
12...	1330	18000	8.9	99	6.2	3.2	6.3	2.0	34	0
12... A	1330	18000	--	--	--	--	--	--	--	--
MAR.										
13...	1410	13300	8.1	0	6.3	2.9	6.4	1.7	29	0
13... A	1410	13300	--	--	--	--	--	--	--	--
MAY										
07...	1400	19000	9.0	--	6.3	2.6	5.3	1.7	27	0
07... A	1400	19000	--	--	--	--	--	--	28	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
12...	28	8.4	5.6	.1	--	.20	--	.008	62	59
12... A	26	--	--	--	--	--	--	--	--	--
MAR.										
13...	24	9.2	5.2	.1	--	.27	--	.000	65	56
13... A	25	--	--	--	--	--	--	--	--	--
MAY										
07...	22	8.0	7.8	.2	.2	--	.006	.020	56	55
07... A	23	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
12...	.08	3010	29	1	31	.5	90	6.8	--	--
12... A	--	--	--	--	--	--	90	6.4	11.0	7.5
MAR.										
13...	.09	2330	28	4	32	.5	82	6.5	--	--
13... A	--	--	--	--	--	--	92	6.5	11.0	25.0
MAY										
07...	.08	2870	26	4	29	.4	84	6.5	--	--
07... A	--	--	--	--	--	--	85	6.3	17.0	25.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
12...	20	--	8.6	.06	--
12... A	--	9.2	--	--	--
MAR.					
13...	35	--	15	.02	--
13... A	--	10.8	--	--	--
MAY					
07...	15	--	14	.10	30
07... A	--	9.5	22	--	--

ROANOKE RIVER BASIN

02081141 ROANOKE RIVER NEAR SANS SOUCI, N. C.

LOCATION.--Lat 35°53'51", long 76°43'49", Bertie County, at bridge on State Highway 45, 2.4 miles upstream from Conaby Creek, 4 miles southeast of Sans Souci, and 4.1 miles upstream from mouth.

DRAINAGE AREA.--9,330 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-69 (partial-record station), October 1969 to June 1973 (discontinued).

02081141 ROANOKE RIVER NEAR SANS SOUCI, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.										
26...	1400	--	--	--	--	--	--	--	--	--
26...A	1400	--	--	--	--	--	--	--	--	26
NOV.										
28...	1420	7.0	115	6.4	2.3	11	2.3	33	0	27
28...A	1420	--	--	--	--	--	--	--	--	30
JAN.										
23...	1300	--	--	--	--	--	--	--	--	--
23...A	1300	--	--	--	--	--	--	--	--	24
MAR.										
21...	1230	6.8	0	5.5	3.0	4.7	1.8	26	0	21
21...A	1230	--	--	--	--	--	--	--	--	24
APR.										
19...	1020	--	--	--	--	--	--	--	--	--
19...A	1020	--	--	--	--	--	--	--	--	30
MAY										
15...	1115	7.0	--	6.7	2.5	7.4	1.9	32	0	26
15...A	1115	--	--	--	--	--	--	36	0	30
JUNE										
19...	1535	--	--	--	--	--	--	--	--	--
19...A	1535	--	--	--	--	--	--	46	0	38

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.									
26...	--	--	--	--	--	--	.16	--	--
26...A	--	--	--	--	--	--	--	--	--
NOV.									
28...	9.6	9.6	.1	--	.15	--	.27	79	64
28...A	--	--	--	--	--	--	--	--	--
JAN.									
23...	--	--	--	--	--	--	.015	--	--
23...A	--	--	--	--	--	--	--	--	--
MAR.									
21...	6.8	5.0	.4	--	.16	--	.22	62	46
21...A	--	--	--	--	--	--	--	--	--
APR.									
19...	--	--	--	--	--	--	.029	--	--
19...A	--	--	--	--	--	--	--	--	--
MAY									
15...	8.0	6.1	.3	.2	--	.004	.040	66	56
15...A	--	--	--	--	--	--	--	--	--
JUNE									
19...	--	--	--	--	--	--	.066	--	--
19...A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
26...	--	--	--	--	--	--	--	--	--
26...A	--	--	--	--	--	115	6.3	16.0	16.5
NOV.									
28...	.11	26	0	43	.9	105	6.6	--	--
28...A	--	--	--	--	--	120	6.3	11.0	20.0
JAN.									
23...	--	--	--	--	--	--	--	--	--
23...A	--	--	--	--	--	105	6.7	8.5	23.5
MAR.									
21...	.08	26	5	26	.4	78	6.6	--	--
21...A	--	--	--	--	--	90	6.5	11.5	8.5
APR.									
19...	--	--	--	--	--	--	--	--	--
19...A	--	--	--	--	--	100	5.7	16.5	22.5
MAY									
15...	.09	27	1	35	.6	96	6.4	--	--
15...A	--	--	--	--	--	100	6.8	19.5	18.5
JUNE									
19...	--	--	--	--	--	--	--	--	--
19...A	--	--	--	--	--	120	6.7	26.0	25.7

02081141 ROANOKE RIVER NEAR SANS SOUCI, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.						
26... A	--	6.7	--	60	--	--
NOV.						
28...	50	--	13	--	.06	--
28... A	--	8.9	--	64	--	--
JAN.						
23... A	--	9.2	--	220	--	--
MAR.						
21...	65	--	10	--	.02	--
21... A	--	11.1	--	72	--	--
APR.						
19... A	--	9.6	--	46	--	--
MAY						
15...	0	--	20	--	.15	20
15... A	--	6.3	9.1	48	--	--
JUNE						
19... A	--	5.6	15	40	--	--

ALBEMARLE SOUND

02081155 ALBEMARLE SOUND NEAR EDENTON, N. C.

LOCATION.--Lat 35°59'13", long 76°30'14", Chowan County, at drawbridge on State Highway 32, 5.1 miles east of Norfolk Southern Railroad, and 7.8 miles southeast of Edenton.

DRAINAGE AREA.--14,800 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1967, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1957 to September 1967. Prior to 1957 published as "near Skinnersville".

EXTREMES.--1957-67:
Specific conductance: Maximum daily, 30,600 micromhos Nov. 6 (B), 1958; minimum daily, 50 micromhos May 20 (B), 1958.
Chloride: Maximum, 12,100 mg/l Nov. 3-6 (B), 1958; minimum, 3.1 mg/l Apr. 11 T(T), 1966.
Water temperatures: Maximum, 31.0°C July 14 (T), 1966; minimum, freezing point on several days in 1961, 1966, and 1967.

REMARKS.--Salinity station prior to October 1967; top (T) and bottom (B) samples were collected once daily. Miscellaneous chemical data published for 1949 water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
JUL.									
19...	1435	5.7	0	8.8	3.3	15	3.2	36	0
19... A	1435	--	--	--	--	--	--	--	--
JUN.									
30...	1130	11	0	10	1.7	10	1.9	28	0
30... A	1130	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.									
19...	30	14	21	.2	.00	.000	97	89	.13
19... A	--	--	--	--	--	--	--	--	--
JAN.									
30...	23	9.8	14	.2	.40	.000	81	74	.11
30... A	--	--	--	--	--	--	--	--	--

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.								
19...	35	6	45	1.1	155	6.6	--	--
19...A	--	--	--	--	--	6.3	23.0	20.0
JAN.								
30...	32	9	39	.8	115	6.9	--	--
30...A	--	--	--	--	--	--	8.0	4.5

02081155 ALBEMARLE SOUND NEAR EDENTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT.				
19...	50	--	14	.17
19...A	--	6.3	--	--
JAN.				
30...	30	--	5.6	.14
30...A	--	12.2	--	--

PAMLICO RIVER BASIN

02082526 TAR RIVER AT ROCKY MOUNT, N. C.

LOCATION.--Lat 35°57'08", long 77°49'08", Nash County, at bridge on U.S. Highway 64, 0.8 mile upstream from Stony Creek, and 1.8 miles west of Rocky Mount.

DRAINAGE AREA.--800 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
DEC.										
12...	0900	840	14	297	5.0	1.7	6.2	2.3	20	0
12...A	0900	840	--	--	--	--	--	--	--	--
MAR.										
13...	0940	2170	9.5	0	4.2	1.8	5.5	1.7	18	0
13...A	0940	2170	--	--	--	--	--	--	--	--
MAY										
07...	0930	1100	14	--	4.1	1.9	5.8	1.4	22	0
07...A	0930	1100	--	--	--	--	--	--	26	0

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
DEC.										
12...	16	9.0	5.6	.5	--	.30	--	.020	61	56
12...A	16	--	--	--	--	--	--	--	--	--
MAR.										
13...	15	8.2	4.6	.2	--	.30	--	.000	57	46
13...A	18	--	--	--	--	--	--	--	--	--
MAY										
07...	18	5.6	4.3	.2	.3	--	.007	.030	57	50
07...A	21	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
DEC.										
12...	.08	138	20	3	38	.6	78	6.7	--	--
12...A	--	--	--	--	--	--	75	6.8	10.0	6.0
MAR.										
13...	.08	334	18	3	37	.6	63	6.5	--	--
13...A	--	--	--	--	--	--	73	6.8	13.5	17.5
MAY										
07...	.07	170	19	1	38	.6	68	6.4	18.0	--
07...A	--	--	--	--	--	--	65	6.5	18.0	22.0

02082526 TAR RIVER AT ROCKY MOUNT, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)
DEC.					
12...	30	--	6.4	.07	--
12...A	--	9.5	--	--	--
MAR.					
13...	50	--	9.1	.06	--
13...A	--	9.0	--	--	--
MAY					
07...	60	9.1	13	.11	30
07...A	--	9.1	13	--	--

PAMLICO RIVER BASIN

02083500 TAR RIVER AT TARBORO, N. C.

LOCATION.--Lat 35°53'38", long 77°32'00", Edgecombe County, at gaging station near right bank on downstream end of pier of bridge on U.S. Highway 64 in Tarboro, 6.5 miles downstream from Fishing Creek, and 49.2 miles upstream from Pamlico River at Washington.

DRAINAGE AREA.--2,140 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1944 to September 1945, October 1953 to September 1954, October 1961 to September 1967, water years 1968-73 (partial-record station).
Water temperatures: October 1944 to September 1945, October 1953 to September 1954, October 1961 to September 1967.
Sediment records: January 1958 to December 1967.

EXTREMES.--1944-45, 1953-54, 1958-67:
Dissolved solids (1944-45, 1953-54, 1961-67): Maximum, 111 mg/l Oct. 22-31, 1963; minimum, 40 mg/l (calculated) Aug. 21-31, 1967.
Hardness (1944-45, 1953-54, 1961-67): Maximum, 33 mg/l Nov. 4, 1963; minimum, 9 mg/l Jan. 21-31, 1954.
Specific conductance (1961-67): Maximum daily, 270 micromhos Nov. 4, 1963; minimum daily, 34 micromhos Aug. 22, 1967.
Water temperatures: Maximum, 30.0°C Aug. 30, 1966; minimum, freezing point on several days in 1963 and 1966.
Sediment concentrations: Maximum daily, 465 mg/l June 22, 1967; minimum daily, 2 mg/l Dec. 2, 1965, Sept. 15-18, 1966 and Dec. 4, 1967.
Sediment discharge: Maximum daily, 6,130 tons May 12, 1958; minimum daily, 1 ton on several days in 1963 and 1966.

REMARKS.--Miscellaneous chemical data published for water years 1944, 1947, 1955-61.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
OCT.											
19...A	1945	1020	--	--	--	--	--	--	--	--	--
JAN.											
30...	1315	4020	9.9	--	0	--	5.1	1.7	5.6	1.9	15
30...A	1315	4020	--	--	--	--	--	--	--	--	--
AUG.											
28...	1045	634	13	2100	380	90	5.2	1.6	4.6	2.4	25
28...A	1045	634	--	--	--	--	--	--	--	--	22

DATE	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (N03) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.											
19...A	--	--	--	--	--	--	--	--	--	--	--
JAN.											
30...	0	12	7.2	7.8	.1	.50	--	--	--	.055	59
30...A	--	--	--	--	--	--	--	--	--	--	--
AUG.											
28...	0	21	5.8	4.4	.2	--	.29	.74	4.6	.17	66
28...A	--	18	--	--	--	--	--	--	--	--	--

02083500 TAR RIVER AT TARBORO, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.											
19... A	--	--	--	--	--	--	--	--	5.9	23.0	18.0
JAN.											
30...	49	.08	540	20	7	35	.5	70	6.2	--	--
31... A	--	--	--	--	--	--	--	--	6.5	9.0	4.5
AUG.											
28...	51	.09	113	20	0	41	.5	69	6.8	24.0	--
28... A	--	--	--	--	--	--	--	82	5.1	24.0	31.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)
OCT.									
19... A	--	--	6.2	--	--	--	--	--	--
JAN.									
31...	70	--	--	15	--	--	.10	--	--
31... A	--	--	9.5	--	--	--	--	--	--
AUG.									
28...	--	30	--	6.3	15	13	--	4	3
28... A	--	--	--	28	--	--	--	--	--

DATE	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.									
19... A	--	--	--	--	--	--	--	--	--
JAN.									
30...	--	--	--	--	--	--	--	--	--
30... A	--	--	--	--	--	--	--	--	--
AUG.									
28...	0	0	0	4	5	.0	.0	4	0
28... A	--	--	--	--	--	--	--	--	--

	TOTAL IRON IN BOTTOM DE-POSITS (UG/G)	TOTAL MANGA-NESE IN BOTTOM DE-POSITS (UG/G)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)
AUG. 28...	9500	1200	1.4	53	1.8	2	0	8	20	5

	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)
AUG. 28...	25	.08	.3	18

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
AUG. 28...	1045	634	36	62

02084356 TRANTERS CREEK NEAR LATHAM, N. C.

LOCATION.--Lat 35°36'19", long 77°08'30", Beaufort County, at Seaboard Coast Line Railroad bridge, 0.4 mile west of Latham.

DRAINAGE AREA.--224 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
DEC.										
12...	1445	9.8	264	5.5	3.2	8.7	2.2	9	0	7
12...A	1445	--	--	--	--	--	--	--	--	8
JAN.										
23...	1530	5.1	0	5.9	1.7	6.6	1.7	7	0	6
23...A	1530	--	--	--	--	--	--	--	--	4
MAY										
15...	1400	5.0	--	4.7	1.3	5.6	1.6	11	0	9
15...A	1400	--	--	--	--	--	--	14	0	11

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.									
12...	22	12	.6	--	.00	--	.010	75	58
12...A	--	--	--	--	--	--	--	--	--
JAN.									
23...	15	11	.1	--	.30	--	.000	72	52
23...A	--	--	--	--	--	--	--	--	--
MAY									
15...	7.6	7.0	.3	.2	--	.005	.060	72	39
15...A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
12...	.10	26	19	39	.7	103	5.9	--	--
12...A	--	--	--	--	--	105	6.0	11.5	8.5
JAN.									
23...	.10	22	16	35	.6	90	5.8	--	--
23...A	--	--	--	--	--	100	6.4	8.5	21.0
MAY									
15...	.10	17	8	39	.6	88	5.9	--	--
15...A	--	--	--	--	--	70	6.6	19.5	22.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
12...	20	--	16	.10	--
12...A	--	7.8	--	--	--
JAN.					
23...	40	--	18	.15	--
23...A	--	11.4	--	--	--
MAY					
15...	100	--	22	.14	10
15...A	--	6.8	5.6	--	--

02084472 PAMLICO RIVER AT WASHINGTON, N. C.

LOCATION.--Lat 35°32'33", long 77°03'43", Beaufort County, at bridge on U S. Highway 17 at Washington, and 0.7 mile downstream from Kennedy Creek.

DRAINAGE AREA.--3,080 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1966, January to April 1967, water years 1968-69 (partial-record station), October 1969 to June 1973 (discontinued).
Water temperatures: October 1961 to September 1967.

EXTREMES.--1961-67:
Specific conductance: Maximum daily, 20,400 micromhos Jan. 20 (B), 1966; minimum daily, 40 micromhos July 31 (B), 1965.
Chloride: Maximum, 7,380 mg/l Jan. 20 (B), 1966; minimum, 4.2 mg/l July 1 (T), 1962.
Water temperatures: Maximum, 32.0°C July 5 (T), 1966; minimum, 0.5°C Dec. 21 (T), 1963, Jan. 31 (B) and Feb. 1 (T), 1966.

REMARKS.--Miscellaneous chemical data published for water year 1949. Salinity station prior to October 1967; top (T) and bottom (B) samples were collected once daily.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.										
26...A	1215	--	--	--	--	--	--	--	--	--
NOV.										
28...	1615	9.3	76	5.	1.5	4.7	2.5	13	0	11
28...A	1615	--	--	--	--	--	--	--	--	10
JAN.										
23...A	1635	--	--	--	--	--	--	--	--	--
MAR.										
21...	1545	7.1	1	5.8	2.0	5.7	2.0	19	0	16
21...A	1545	--	--	--	--	--	--	--	--	15
APR.										
18...A	1510	--	--	--	--	--	--	--	--	--
MAY										
15...	1520	12	--	6.4	2.1	7.5	1.9	23	0	19
15...A	1520	--	--	--	--	--	--	26	0	21
JUNE										
19...A	1700	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.									
26...A	--	--	--	--	--	--	--	--	--
NOV.									
28...	1)	6.8	.1	--	.00	--	.060	68	46
28...A	--	--	--	--	--	--	--	--	--
JAN.									
23...A	--	--	--	--	--	--	--	--	--
MAR.									
21...	7.2	6.2	.3	--	.66	--	.000	65	51
21...A	--	--	--	--	--	--	--	--	--
APR.									
18...A	--	--	--	--	--	--	--	--	--
MAY									
15...	9.6	7.3	.3	.6	--	.017	.10	74	58
15...A	--	--	--	--	--	--	--	--	--
JUNE									
19...A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CARBONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
26...A	--	--	--	--	--	2400	6.2	16.0	19.0
NOV.									
28...	.09	19	6	31	.5	70	6.9	--	--
28...A	--	--	--	--	--	75	6.3	8.5	19.0
JAN.									
23...A	--	--	--	--	--	89	6.7	8.5	18.0
MAR.									
21...	.09	23	7	33	.5	82	6.1	--	--
21...A	--	--	--	--	--	85	5.9	13.8	10.0
APR.									
18...A	--	--	--	--	--	85	6.7	16.5	23.5
MAY									
15...	.10	24	5	38	.7	92	6.4	--	--
15...A	--	--	--	--	--	90	6.8	22.0	22.5
JUNE									
19...A	--	--	--	--	--	105	6.7	27.5	27.0

02084472 PAMLICO RIVER AT WASHINGTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.						
26...A	--	7.0	--	1340	--	--
NOV.						
28...	65	--	2.6	--	.10	--
28...A	--	10.6	--	160	--	--
JAN.						
23...A	--	11.4	--	420	--	--
MAR.						
21...	65	--	24	--	.07	--
21...A	--	8.8	--	130	--	--
APR.						
18...A	--	8.8	--	160	--	--
MAY						
15...	50	--	15	--	.19	10
15...A	--	7.8	6.6	130	--	--
JUNE						
19...A	--	8.1	--	460	--	--

PAMLICO RIVER BASIN

02084540 DURHAM CREEK AT EDWARD, N. C.

LOCATION.--Lat 35°19'25", long 76°52'26", Beaufort County, temperature recorder at gaging station on left bank 5 ft downstream from bridge on Secondary Road 1949, at Edward, and 6.8 miles upstream from mouth.

DRAINAGE AREA.--21 sq mi, approximately.

PERIOD OF RECORD.--Water temperatures: October 1965 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 28.5°C July 27, 28; minimum, freezing point Feb. 13.

Period of record:
Water temperatures: Maximum, 31.0°C July 13, 1966; minimum, freezing point on many days in January 1970 and Feb. 13, 1973.

REMARKS.--Miscellaneous chemical data published for water years 1950-54, 1956, 1957, 1959, 1960, 1966, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	19.5	15.0	14.5	10.0	10.0	12.0	14.5	9.0	5.5	9.0	5.5
2	19.5	18.0	15.5	14.5	10.0	9.0	---	---	9.5	8.5	10.0	6.0
3	18.5	18.0	18.0	15.5	9.0	8.5	---	---	9.0	7.0	11.0	9.5
4	18.5	18.0	18.5	18.0	10.0	9.0	---	---	7.0	4.0	13.5	11.0
5	20.0	18.5	18.5	16.0	10.5	10.0	---	---	6.5	4.0	13.5	13.5
6	20.0	20.0	16.0	14.5	13.5	10.5	---	---	12.0	6.5	14.0	13.5
7	20.0	19.5	14.5	13.5	13.5	13.0	---	---	12.0	10.0	13.5	13.0
8	19.5	19.0	15.5	14.5	13.0	11.0	---	---	10.0	9.0	15.5	13.5
9	18.0	16.5	15.5	14.0	14.0	11.5	---	---	9.0	8.0	15.5	15.5
10	17.0	16.0	14.0	12.0	15.5	14.0	---	---	9.5	8.0	15.5	15.0
11	16.0	15.5	14.0	12.0	15.5	13.5	---	---	9.5	8.0	16.0	14.0
12	16.0	15.5	14.0	13.5	13.5	13.0	---	---	9.0	2.0	19.5	16.0
13	16.5	16.0	13.5	13.0	13.5	13.0	9.5	9.0	2.0	0.0	19.0	15.5
14	16.5	16.5	15.0	13.5	13.5	13.5	10.5	9.0	0.5	0.5	18.5	14.0
15	17.0	16.5	15.0	13.5	13.5	12.0	10.5	10.0	0.5	0.5	21.0	18.0
16	16.5	15.5	13.5	11.0	13.5	4.0	10.0	9.0	3.0	0.5	21.0	19.5
17	17.0	15.5	11.5	11.5	8.0	4.5	9.0	4.5	4.5	3.0	21.0	17.0
18	17.0	16.5	11.5	10.0	4.5	3.0	4.5	1.0	4.5	1.5	17.0	12.0
19	17.0	15.5	11.0	10.5	4.5	3.0	1.0	0.5	1.5	1.0	13.0	10.0
20	15.5	13.0	14.0	11.0	8.5	4.5	0.5	0.5	3.5	1.0	13.0	10.0
21	13.0	11.5	14.0	10.5	10.5	8.5	0.5	0.5	6.5	3.5	12.0	11.0
22	12.0	11.5	10.5	9.0	14.0	10.5	1.0	0.5	6.5	5.5	11.0	9.0
23	14.0	12.0	9.0	7.0	14.0	12.0	3.0	1.0	6.5	4.5	11.0	7.0
24	16.0	14.0	7.0	5.5	12.0	11.0	3.5	3.0	7.0	5.0	11.5	8.0
25	16.0	16.0	6.5	5.0	11.0	10.5	4.5	3.0	8.5	5.5	11.5	9.0
26	16.0	15.5	11.0	6.5	10.5	10.0	9.0	4.5	9.0	8.0	16.0	10.5
27	15.5	14.5	11.0	9.5	10.0	8.5	8.0	6.5	9.0	9.0	16.0	13.5
28	16.5	14.5	10.0	9.0	8.5	4.0	6.5	5.5	8.0	6.0	13.5	9.5
29	16.5	16.5	10.0	10.0	8.0	6.5	9.0	6.5	---	---	13.0	11.0
30	16.5	16.0	10.0	10.0	10.0	8.0	9.5	8.0	---	---	13.5	11.5
31	16.0	15.0	---	---	12.0	10.0	6.5	6.0	---	---	14.5	13.5
MONTH	23.0	11.5	18.5	5.0	15.5	4.0	---	---	12.0	0.0	21.0	5.5

02084540 DURHAM CREEK AT EDWARD, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	25.0	22.0	24.0	23.0	26.5	25.5	27.0	26.5
2	---	---	---	---	23.5	21.0	24.0	23.5	27.0	26.0	27.0	26.5
3	---	---	---	---	23.5	22.0	24.0	23.5	26.5	23.0	27.0	26.5
4	---	---	---	---	23.5	22.0	25.0	24.0	---	---	27.0	26.5
5	---	---	---	---	24.0	23.0	25.5	24.5	---	---	26.5	25.5
6	---	---	---	---	24.5	23.5	25.0	24.5	---	---	26.5	25.5
7	---	---	---	---	24.0	23.5	25.5	24.5	---	---	29.0	26.5
8	---	---	16.5	15.5	24.5	23.5	25.5	24.5	25.5	25.5	24.0	26.5
9	---	---	19.0	16.5	25.5	24.0	25.5	24.5	26.5	25.5	27.0	26.5
10	---	---	20.5	19.0	25.5	24.5	26.5	24.5	26.0	26.0	26.5	25.5
11	---	---	21.5	20.0	28.0	25.0	26.0	25.0	26.0	25.5	25.5	24.0
12	---	---	22.0	21.0	26.5	24.5	25.5	24.5	26.5	26.0	24.5	23.5
13	---	---	22.0	21.0	26.0	25.0	25.5	23.5	27.0	26.5	24.5	24.0
14	---	---	21.0	20.0	26.0	24.5	25.5	24.0	28.0	27.0	25.5	24.5
15	---	---	20.0	20.0	26.5	24.5	25.0	24.5	29.0	28.0	25.5	25.0
16	---	---	20.0	19.0	25.5	24.0	25.0	24.5	28.0	27.0	25.5	24.5
17	---	---	19.0	17.0	28.0	24.5	25.0	24.5	27.0	26.5	24.5	24.5
18	---	---	19.5	16.5	26.5	26.0	24.5	23.5	26.5	26.5	25.0	24.5
19	---	---	18.0	15.5	26.5	26.0	24.0	23.0	26.5	26.0	24.5	23.5
20	---	---	17.0	16.5	26.0	25.5	24.5	23.5	26.0	25.5	23.5	21.5
21	---	---	18.5	16.5	26.0	25.5	25.0	23.5	26.5	25.5	23.5	23.0
22	---	---	19.0	17.0	26.0	25.5	26.0	24.5	26.5	25.5	23.5	21.5
23	---	---	21.0	19.0	26.0	25.5	26.0	25.0	25.5	25.5	24.5	23.5
24	---	---	21.0	20.0	25.5	24.5	26.0	24.5	25.5	25.5	25.0	24.5
25	---	---	20.5	20.0	25.0	23.5	26.0	24.0	25.5	25.5	25.0	25.0
26	---	---	20.0	19.0	25.0	23.5	27.0	23.5	25.5	25.0	25.0	24.5
27	---	---	20.0	19.0	24.0	23.5	28.5	24.5	25.0	24.5	25.0	24.5
28	---	---	24.0	20.0	25.5	23.5	28.5	25.5	26.0	25.0	24.5	24.0
29	---	---	26.0	23.0	25.5	25.0	27.0	25.0	26.5	26.0	24.5	24.0
30	---	---	25.0	23.0	25.0	24.0	27.0	25.0	27.0	26.5	24.0	24.0
31	---	---	25.5	23.5	---	---	26.5	25.0	27.0	26.5	---	---
MONTH	---	---	---	---	28.0	21.0	28.5	23.0	28.0	23.0	28.0	21.5
YEAR	28.5	0.0										

NEUSE RIVER BASIN

02087182 NEUSE RIVER AT FALLS, N. C.

LOCATION.--Lat 35°56'27", long 78°34'57", Wake County, at bridge on Secondary Road 2000, at Falls, 0.2 mile downstream from Honeycutt Creek, and 0.3 mile upstream from gaging station.

DRAINAGE AREA.--770 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1953 to September 1954, November 1960 to September 1967, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1953 to September 1954, November 1960 to September 1967.

EXTREMES.--1953-54, 1960-67:
Dissolved solids: Maximum, 140 mg/l Nov. 1-5, 1963; minimum, 38 mg/l Jan. 15-17, 1961.
Hardness: Maximum, 56 mg/l Sept. 22, 1966; minimum, 11 mg/l July 2, 1963.
Specific conductance (1960-67): Maximum daily, 355 micromhos Sept. 22, 1966; minimum daily, 37 micromhos Aug. 4, 1961.
Water temperatures: Maximum, 27.0°C July 15, 1954 and July 12, Aug. 23, 1966; minimum, freezing point on many days during 1960-62.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO_2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO_3) (MG/L)	CAR-BONATE (CO_3) (MG/L)
DEC.										
11...	1530	809	13	241	5.3	3.2	7.1	2.3	29	0
11... A	1530	809	--	--	--	--	--	--	--	--
MAR.										
12...	1600	2390	11	0	4.6	2.0	5.9	1.5	20	0
12... A	1600	2390	--	--	--	--	--	--	--	--
MAY										
08...	1700	578	12	--	5.4	2.3	6.0	1.5	23	0
08... A	1700	578	--	--	--	--	--	--	28	0

02087182 NEUSE RIVER AT FALLS, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
11...	24	12	5.8	.6	--	.30	--	.13	69	66
11... A	25	--	--	--	--	--	--	--	--	--
MAR.										
12...	16	6.2	5.4	.2	--	.60	--	.18	61	52
12... A	16	--	--	--	--	--	--	--	--	--
MAY										
08...	19	8.0	5.6	.2	.4	--	.002	.080	59	52
08... A	23	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
11...	.09	151	26	2	34	.6	93	7.0	--	--
11... A	--	--	--	--	--	--	100	6.5	11.5	9.0
MAR.										
12...	.08	394	20	3	37	.6	70	6.8	--	--
12... A	--	--	--	--	--	--	80	6.0	14.0	27.6
MAY										
08...	.08	92.1	23	4	34	.5	78	6.4	--	--
08... A	--	--	--	--	--	--	80	6.0	17.5	18.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
11...	20	--	4.6	.03	--
11... A	--	10.5	--	--	--
MAR.					
12...	45	--	5.1	.06	--
12... A	--	11.2	--	--	--
MAY					
08...	40	--	15	.10	10
08... A	--	9.2	45	--	--

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
JUNE				
29...	1030	11300	615	18800
29...	1400	11100	506	15200
29...	1515	10800	439	12800

02087224 NEUSE RIVER AT BUFFALO ROAD, NEAR RALEIGH, N. C.

LOCATION.--Lat 35°50'55", long 78°31'50", Wake County, water-quality recorder at bridge on Secondary Road 2215, 0.5 mile below Hodges Mill Creek, and 3.4 miles north of Milburnie.

DRAINAGE AREA.--860 sq mi.

PERIOD OF RECORD.--Chemical analyses: January 1958 to September 1960, October 1968 to February 1969, October 1970 to June 1973 (discontinued). Prior to 1969 published as "near Milburnie".
Water temperatures: January 1958 to September 1960, October 1968 to February 1969, October 1970 to June 1973 (discontinued).

EXTREMES.--October 1972 to June 1973:
Specific conductance: Maximum recorded, 191 micromhos Oct. 25; minimum recorded, 40 micromhos Mar. 6, 13.
pH: Maximum recorded, 8.6 units Mar. 4, 5; minimum recorded, 5.1 units May 6.
Dissolved oxygen: Maximum recorded, 15.0 mg/l Jan. 30; minimum recorded, 3.9 mg/l June 11.
Water temperatures: Maximum recorded, 24.5°C June 10, 11, 12, 13; minimum recorded, 0.5°C Jan. 14.

Period of record:
Dissolved solids (1958-60): Maximum, 154 mg/l Dec. 2-10, 1958; minimum, 30 mg/l July 10-13, 1959.
Hardness (1958-60): Maximum, 33 mg/l Nov. 1, 5-8, 1958; minimum, 13 mg/l May 6-10, 1958.
Specific conductance (1958-60, 1970-73): Maximum recorded, 972 micromhos Oct. 26, 1970; minimum recorded, 31 micromhos Oct. 3, 1971.
Dissolved oxygen (1971-73): Maximum recorded, 15.0 mg/l Jan. 30, 1973; minimum recorded, 0.3 mg/l July 15, 1972.
Water temperatures (1958-60, 1970-73): Maximum recorded, 32.5°C July 15, 1972; minimum, freezing point Dec. 11, 25, 27, 1958, Jan. 25, 1960.

REMARKS.--Water quality data for the 1970 water year were unreliable and were not published. Considerable data lost during year because of equipment malfunctions.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), OCTOBER 1972 TO JUNE 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	146	114	129	93	77	86	107	77	82
2	---	---	---	158	134	141	98	87	93	87	77	79
3	---	---	---	163	142	151	89	83	85	84	77	80
4	---	---	---	159	136	149	85	84	85	98	81	86
5	135	111	120	153	134	143	92	88	90	102	74	84
6	117	45	78	186	131	150	100	94	97	75	72	74
7	63	---	---	190	162	171	109	101	105	75	73	74
8	41	---	---	162	73	122	111	99	106	77	74	76
9	53	---	---	89	71	79	98	83	88	79	77	78
10	66	52	59	82	72	77	95	83	86	88	85	86
11	102	68	81	91	79	85	106	89	98	89	85	88
12	102	90	94	102	90	97	101	93	97	97	89	94
13	128	97	111	97	91	93	---	---	---	100	97	99
14	149	113	129	117	99	108	---	---	---	101	99	100
15	150	94	---	122	114	117	---	---	---	107	98	102
16	154	98	115	119	96	107	---	---	---	106	98	103
17	185	144	161	115	89	95	---	---	---	120	87	100
18	185	144	170	90	88	89	---	---	---	90	85	88
19	---	---	---	89	64	72	---	---	---	97	88	91
20	---	---	---	65	60	62	---	---	---	96	89	91
21	---	---	---	70	64	66	---	---	---	97	85	91
22	---	---	---	71	60	64	70	51	---	101	84	90
23	---	---	---	67	60	64	64	46	---	111	87	91
24	---	---	---	76	66	71	58	---	---	113	80	91
25	191	152	174	82	75	77	64	58	61	88	83	86
26	184	153	168	83	70	79	65	63	64	90	88	89
27	187	147	168	78	65	70	78	65	72	92	90	90
28	177	139	161	67	64	65	81	72	77	105	85	92
29	158	102	122	77	67	72	91	77	81	91	87	90
30	129	107	118	78	74	75	81	77	78	89	87	88
31	148	130	140	---	---	---	78	69	76	88	72	77
MONTH	---	---	---	190	60	98	---	---	---	120	72	88

02087224 NEUSE RIVER AT BUFFALO ROAD, NEAR RALEIGH, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), OCTOBER 1972 TO JUNE 1973

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	80	73	78	72	41	50	---	---	---	73	66	69
2	---	---	---	44	41	44	---	---	---	73	---	---
3	---	---	---	45	43	---	---	---	---	41	---	---
4	---	---	---	54	41	---	---	---	---	55	---	---
5	---	---	---	60	---	---	---	---	---	57	42	47
6	---	---	---	42	40	---	---	---	---	44	---	---
7	---	---	---	64	---	---	---	---	---	43	---	---
8	---	---	---	67	41	52	---	---	---	44	41	42
9	---	---	---	74	66	71	---	---	---	107	42	77
10	---	---	---	66	53	60	---	---	---	120	83	94
11	---	---	---	65	42	---	---	---	---	102	82	89
12	---	---	---	---	---	---	---	---	---	92	80	85
13	---	---	---	95	40	49	---	---	---	84	80	82
14	---	---	---	43	41	42	---	---	---	141	81	104
15	---	---	---	43	41	42	---	---	---	143	110	126
16	---	---	---	44	41	43	---	---	---	143	109	125
17	---	---	---	83	42	68	101	91	94	145	111	126
18	---	---	---	99	72	80	101	90	93	157	115	133
19	---	---	---	73	67	70	104	93	98	153	105	123
20	---	---	---	---	---	---	100	95	97	---	---	---
21	---	---	---	---	---	---	104	79	87	---	---	---
22	---	---	---	---	---	---	83	80	81	---	---	---
23	---	---	---	---	---	---	86	80	82	---	---	---
24	---	---	---	---	---	---	116	80	95	---	---	---
25	---	---	---	---	---	---	111	102	106	---	---	---
26	---	---	---	---	---	---	119	97	105	---	---	---
27	---	---	---	---	---	---	102	70	86	---	---	---
28	109	57	78	---	---	---	72	54	63	---	---	---
29	---	---	---	---	---	---	57	54	55	104	78	93
30	---	---	---	---	---	---	67	57	62	83	68	72
31	---	---	---	---	---	---	---	---	---	89	73	81
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	97	90	93	---	---	---	---	---	---	---	---	---
2	98	95	97	---	---	---	---	---	---	---	---	---
3	112	98	106	---	---	---	---	---	---	---	---	---
4	137	88	101	---	---	---	---	---	---	---	---	---
5	175	134	149	---	---	---	---	---	---	---	---	---
6	183	140	159	---	---	---	---	---	---	---	---	---
7	174	134	152	---	---	---	---	---	---	---	---	---
8	157	134	145	---	---	---	---	---	---	---	---	---
9	158	132	143	---	---	---	---	---	---	---	---	---
10	153	110	130	---	---	---	---	---	---	---	---	---
11	183	107	128	---	---	---	---	---	---	---	---	---
12	179	147	160	---	---	---	---	---	---	---	---	---
13	173	155	163	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	191	40										

02087224 NEUSE RIVER AT BUFFALO ROAD, NEAR RALEIGH, N. C.--Continued

pH (UNITS), OCTOBER 1972 TO MAY 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	6.6	6.5	6.5	6.5	6.5	6.5	---	---	---
2	---	---	---	6.7	6.5	6.6	6.6	6.5	6.5	---	---	---
3	---	---	---	7.1	6.7	6.9	6.6	6.5	6.5	---	---	---
4	---	---	---	6.8	6.6	6.7	6.7	6.6	6.6	---	---	---
5	7.0	6.7	6.9	6.6	6.5	6.5	6.7	6.6	6.6	---	---	---
6	7.1	6.7	6.9	6.5	6.4	6.5	6.9	6.6	6.7	---	---	---
7	6.9	6.4	6.7	6.6	6.4	6.5	6.7	6.6	6.7	---	---	---
8	6.3	6.1	6.1	6.6	6.0	6.3	6.6	6.6	6.6	---	---	---
9	6.1	6.0	6.1	6.0	5.8	6.0	6.7	6.6	6.6	---	---	---
10	6.0	5.9	5.9	6.0	5.8	5.9	6.8	6.6	6.7	---	---	---
11	6.2	5.9	6.1	5.9	5.8	5.9	6.8	6.6	6.7	---	---	---
12	6.4	6.2	6.3	6.1	5.9	6.0	6.6	6.6	6.6	---	---	---
13	6.6	6.4	6.5	6.2	6.0	6.1	---	---	---	---	---	---
14	6.8	6.4	6.6	6.6	6.2	6.4	---	---	---	---	---	---
15	6.6	6.4	6.5	6.3	6.2	6.3	---	---	---	---	---	---
16	6.7	6.4	6.5	6.5	6.4	6.4	---	---	---	---	---	---
17	7.0	6.6	6.8	6.5	6.3	6.3	---	---	---	---	---	---
18	6.6	6.5	6.5	6.3	6.2	6.2	---	---	---	---	---	---
19	---	---	---	6.2	6.1	6.2	---	---	---	---	---	---
20	---	---	---	6.2	6.1	6.1	---	---	---	---	---	---
21	---	---	---	6.3	6.2	6.2	---	---	---	---	---	---
22	---	---	---	6.1	6.1	6.1	---	---	---	6.9	6.2	6.5
23	---	---	---	6.2	6.1	6.1	---	---	---	6.2	6.1	6.1
24	---	---	---	6.2	5.9	6.1	---	---	---	6.1	6.0	6.1
25	6.9	6.8	6.9	6.2	6.1	6.1	---	---	---	6.1	6.0	6.0
26	6.8	6.6	6.7	6.3	6.2	6.3	---	---	---	6.2	6.0	6.1
27	6.7	6.5	6.6	6.6	6.3	6.4	---	---	---	6.3	6.1	6.2
28	7.1	6.7	6.9	6.5	6.4	6.4	---	---	---	6.2	6.0	6.1
29	7.1	6.7	6.9	6.5	6.4	6.4	---	---	---	6.2	5.9	6.0
30	6.7	6.4	6.5	6.5	6.4	6.5	---	---	---	6.1	5.9	6.0
31	6.5	6.4	6.5	---	---	---	---	---	---	6.0	5.9	5.9
MONTH	---	---	---	7.1	5.8	6.3	---	---	---	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.6	5.9	6.2	7.2	---	---	---	---	---	6.5	6.1	6.3
2	---	---	---	6.6	---	---	---	---	---	6.6	5.7	6.3
3	---	---	---	8.0	6.3	7.3	---	---	---	6.8	6.2	6.4
4	---	---	---	8.6	7.9	8.2	---	---	---	6.5	5.8	6.2
5	---	---	---	8.6	7.8	8.3	---	---	---	6.7	6.3	6.4
6	---	---	---	8.4	8.3	8.3	---	---	---	6.8	5.1	6.3
7	---	---	---	8.2	7.6	7.9	---	---	---	6.9	6.4	6.6
8	---	---	---	8.1	7.3	7.8	---	---	---	6.8	6.6	6.7
9	---	---	---	7.3	7.2	7.3	---	---	---	7.1	6.6	6.9
10	---	---	---	6.9	6.7	6.8	---	---	---	6.6	6.5	6.6
11	---	---	---	7.8	---	---	---	---	---	6.6	6.5	6.6
12	---	---	---	7.5	---	---	---	---	---	6.6	6.5	6.6
13	---	---	---	6.9	6.1	6.6	---	---	---	6.6	6.5	6.6
14	---	---	---	7.9	6.4	7.3	---	---	---	6.6	6.5	6.6
15	---	---	---	7.8	7.2	7.5	---	---	---	6.6	6.5	6.6
16	---	---	---	7.6	7.0	7.2	---	---	---	6.6	6.5	6.6
17	---	---	---	7.2	---	---	6.5	6.5	6.5	6.6	6.5	6.6
18	---	---	---	8.3	---	---	6.5	6.4	6.5	6.6	6.5	6.6
19	---	---	---	6.2	6.0	6.0	6.6	6.5	6.5	6.6	6.5	6.6
20	---	---	---	---	---	---	6.6	6.4	6.5	---	---	---
21	---	---	---	---	---	---	6.6	6.5	6.5	---	---	---
22	---	---	---	---	---	---	6.7	6.5	6.6	---	---	---
23	---	---	---	---	---	---	6.7	6.5	6.6	---	---	---
24	---	---	---	---	---	---	6.7	6.6	6.6	---	---	---
25	---	---	---	---	---	---	6.7	6.5	6.6	---	---	---
26	---	---	---	---	---	---	6.7	6.6	6.7	---	---	---
27	---	---	---	---	---	---	6.7	6.3	6.6	---	---	---
28	6.9	1.1	6.1	---	---	---	6.4	6.2	6.3	---	---	---
29	---	---	---	---	---	---	6.2	5.2	---	7.2	6.8	7.0
30	---	---	---	---	---	---	6.3	5.9	6.2	6.8	6.6	6.7
31	---	---	---	---	---	---	---	---	---	6.6	6.5	6.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

02087224 NEUSE RIVER AT BUFFALO ROAD, NEAR RALEIGH, N. C.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, OCTOBER 1972 TO MAY 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	9.6	8.6	9.0	---	---	---	---	---	---	---	---	---
6	9.7	8.9	9.2	---	---	---	---	---	---	---	---	---
7	9.7	9.1	9.5	---	---	---	---	---	---	---	---	---
8	9.7	9.4	9.6	---	---	---	---	---	---	---	---	---
9	9.7	9.5	9.5	---	---	---	---	---	---	---	---	---
10	9.5	8.2	8.9	---	---	---	---	---	---	---	---	---
11	10.2	8.8	9.8	---	---	---	---	---	---	---	---	---
12	10.4	10.1	10.3	---	---	---	---	---	---	---	---	---
13	10.2	9.8	10.0	---	---	---	---	---	---	---	---	---
14	9.8	9.1	9.5	---	---	---	---	---	---	---	---	---
15	11.4	8.9	9.2	---	---	---	---	---	---	---	---	---
16	9.2	8.6	9.0	---	---	---	---	---	---	---	---	---
17	8.6	7.8	8.1	---	---	---	---	---	---	---	---	---
18	8.8	8.0	8.4	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	11.6	10.3	10.7
23	---	---	---	---	---	---	---	---	---	12.5	9.4	10.9
24	---	---	---	---	---	---	---	---	---	13.6	10.9	12.3
25	8.0	7.4	7.7	---	---	---	---	---	---	14.1	12.0	13.2
26	8.2	7.8	8.0	---	---	---	---	---	---	14.4	12.3	13.5
27	8.4	7.8	8.0	---	---	---	---	---	---	14.1	11.5	12.6
28	8.2	7.0	7.8	---	---	---	---	---	---	13.4	11.2	12.2
29	7.7	6.3	7.2	---	---	---	---	---	---	14.0	11.0	12.3
30	6.4	5.9	6.2	---	---	---	---	---	---	15.0	12.0	13.6
31	---	---	---	---	---	---	---	---	---	14.5	11.8	12.8
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.4	11.2	12.5	---	---	---	---	---	---	---	---	---
2	---	---	---	11.4	---	---	---	---	---	---	---	---
3	---	---	---	10.9	---	---	---	---	---	---	---	---
4	---	---	---	11.4	---	---	---	---	---	---	---	---
5	---	---	---	11.3	---	---	---	---	---	---	---	---
6	---	---	---	11.4	---	---	---	---	---	---	---	---
7	---	---	---	11.4	---	---	---	---	---	---	---	---
8	---	---	---	11.3	---	---	---	---	---	---	---	---
9	---	---	---	11.3	---	---	---	---	---	8.6	---	---
10	---	---	---	13.1	---	---	---	---	---	8.6	7.6	8.3
11	---	---	---	12.3	10.6	12.0	---	---	---	8.6	5.9	7.3
12	---	---	---	11.9	10.8	11.7	---	---	---	7.1	5.9	6.4
13	---	---	---	11.7	11.0	11.4	---	---	---	6.6	5.5	5.9
14	---	---	---	11.2	10.7	11.0	---	---	---	7.8	5.0	6.2
15	---	---	---	10.7	9.9	10.4	---	---	---	6.8	5.8	6.4
16	---	---	---	9.9	9.0	9.5	---	---	---	7.1	6.2	6.6
17	---	---	---	10.2	8.8	9.4	10.3	9.7	9.8	7.0	6.1	6.7
18	---	---	---	12.6	9.2	10.6	9.8	9.3	9.6	6.6	6.1	6.3
19	---	---	---	11.9	10.3	11.1	9.3	8.2	8.8	7.9	6.3	7.3
20	---	---	---	---	---	---	9.0	8.2	8.7	---	---	---
21	---	---	---	---	---	---	9.7	8.5	9.0	---	---	---
22	---	---	---	---	---	---	9.8	8.6	9.1	---	---	---
23	---	---	---	---	---	---	9.7	7.9	8.8	---	---	---
24	---	---	---	---	---	---	9.3	7.7	8.5	---	---	---
25	---	---	---	---	---	---	8.0	---	---	---	---	---
26	---	---	---	---	---	---	9.1	---	---	---	---	---
27	---	---	---	---	---	---	9.0	---	---	---	---	---
28	---	---	---	---	---	---	9.7	---	---	---	---	---
29	---	---	---	---	---	---	7.4	---	---	8.5	---	---
30	---	---	---	---	---	---	---	---	---	8.6	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

02087224 NEUSE RIVER AT BUFFALO ROAD, NEAR RALEIGH, N. C.--Continued

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO MAY 1973

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	15.0	14.5	15.0	8.5	5.0	6.5	13.5	11.0	12.5
2	---	---	---	17.5	14.0	16.0	11.5	---	---	11.5	9.0	10.5
3	---	---	---	19.5	17.0	18.0	11.5	---	---	9.0	7.5	8.5
4	---	---	---	18.5	16.0	17.5	12.0	---	---	9.0	7.5	8.5
5	19.0	18.0	18.5	17.0	14.5	15.5	17.0	---	---	7.5	7.0	7.5
6	18.0	17.5	18.0	15.5	13.5	14.5	18.0	12.5	16.0	8.0	7.0	7.5
7	18.5	17.5	18.0	18.0	12.5	15.0	15.5	---	---	7.0	5.5	6.0
8	17.0	16.0	16.5	18.0	13.0	16.0	9.5	9.5	9.0	5.0	2.5	3.5
9	16.5	15.0	16.0	18.0	11.0	14.0	10.0	8.5	9.5	3.0	2.0	2.5
10	15.0	14.0	14.5	17.0	10.5	13.5	12.0	10.0	11.0	2.5	1.5	2.0
11	14.0	13.0	14.0	19.0	12.5	15.5	11.0	10.0	10.5	2.5	1.5	2.0
12	14.0	12.5	13.5	16.0	11.5	14.0	10.0	10.0	10.0	2.5	1.5	2.0
13	15.5	14.0	14.5	17.0	---	---	---	---	---	2.5	1.0	1.5
14	17.0	14.5	15.5	23.5	17.5	20.5	---	---	---	2.5	0.5	1.5
15	16.0	14.0	15.5	16.5	---	---	---	---	---	3.5	2.0	2.5
16	15.5	13.5	14.5	14.5	10.0	11.5	---	---	---	3.5	1.5	3.0
17	18.0	15.5	16.5	10.5	---	---	---	---	---	5.0	1.5	3.5
18	16.0	14.5	15.0	10.0	7.5	9.0	---	---	---	8.0	2.5	4.5
19	---	---	---	11.0	---	---	---	---	---	9.0	5.0	7.0
20	---	---	---	11.0	8.0	9.5	---	---	---	9.0	4.5	6.5
21	---	---	---	14.0	10.0	11.5	---	---	---	7.0	---	---
22	---	---	---	10.5	6.0	8.0	11.0	---	---	---	5.5	---
23	---	---	---		---	---	10.5	8.5	9.5	8.5	6.5	7.5
24	---	---	---	8.5	---	---	10.5	8.5	10.0	7.5	6.5	7.5
25	15.0	14.0	14.5	13.0	---	---	10.5	9.0	10.0	7.5	5.5	6.5
26	14.0	12.0	13.0	14.5	8.5	11.5	9.5	8.5	9.0	6.5	5.0	6.0
27	12.5	11.0	12.0	12.5	---	---	8.5	7.0	7.5	8.0	6.5	7.0
28	15.5	12.5	14.5	14.0	---	---	8.5	6.0	7.0	7.5	6.0	7.0
29	15.5	14.0	15.0	10.5	7.5	9.5	7.5	5.0	6.0	7.5	6.5	7.0
30	14.5	12.0	13.5	9.0	6.0	7.0	8.5	7.0	7.5	6.0	5.0	5.5
31	15.0	15.0	15.0	---	---	---	12.5	8.5	11.5	5.5	4.0	5.0
MONTH	---	---	---	23.5	---	---	---	---	---	13.5	0.5	5.5

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.5	4.5	7.0	7.5	4.5	5.5	---	---	---	18.5	14.5	16.5
2	---	---	---	9.0	5.0	7.0	---	---	---	19.0	15.5	17.5
3	---	---	---	13.5	8.0	11.0	---	---	---	20.0	17.0	18.0
4	---	---	---	13.5	10.0	12.0	---	---	---	19.0	15.0	17.0
5	---	---	---	14.0	10.0	12.5	---	---	---	18.0	13.5	15.5
6	---	---	---	13.0	12.0	12.5	---	---	---	18.0	12.5	15.5
7	---	---	---	13.0	12.0	12.5	---	---	---	21.0	14.0	17.5
8	---	---	---	13.5	12.0	13.0	---	---	---	20.5	16.0	18.5
9	---	---	---	13.0	11.5	12.5	---	---	---	21.5	17.5	19.0
10	---	---	---	13.5	12.5	13.0	---	---	---	18.5	17.0	18.0
11	---	---	---	13.5	12.5	13.0	---	---	---	20.0	17.5	19.0
12	---	---	---	15.0	12.0	13.5	---	---	---	20.0	18.5	19.5
13	---	---	---	14.0	12.5	13.5	---	---	---	20.0	18.5	19.0
14	---	---	---	17.0	13.0	14.5	---	---	---	19.5	18.0	19.0
15	---	---	---	17.5	14.5	16.0	---	---	---	19.0	17.5	18.5
16	---	---	---	18.5	15.5	17.0	---	---	---	18.5	16.5	17.5
17	---	---	---	17.5	14.0	15.5	14.5	14.0	14.0	17.5	16.0	16.5
18	---	---	---	14.5	12.5	13.5	15.5	13.5	14.5	17.0	15.0	16.0
19	---	---	---	12.0	11.5	11.5	17.0	14.5	16.0	17.0	15.0	16.0
20	---	---	---	---	---	---	18.0	15.5	16.5	---	---	---
21	---	---	---	---	---	---	19.0	16.0	17.5	---	---	---
22	---	---	---	---	---	---	20.0	17.0	18.5	---	---	---
23	---	---	---	---	---	---	20.0	18.0	19.5	---	---	---
24	---	---	---	---	---	---	20.0	18.5	19.5	---	---	---
25	---	---	---	---	---	---	19.5	18.5	19.0	---	---	---
26	---	---	---	---	---	---	19.5	18.0	18.5	---	---	---
27	---	---	---	---	---	---	19.0	16.0	18.0	---	---	---
28	6.5	5.0	5.5	---	---	---	15.5	14.0	15.0	---	---	---
29	---	---	---	---	---	---	15.5	13.5	14.5	21.5	20.0	21.0
30	---	---	---	---	---	---	17.5	13.5	15.5	21.5	20.0	20.5
31	---	---	---	---	---	---	---	---	---	21.0	19.5	20.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

02087500 NEUSE RIVER NEAR CLAYTON, N. C.

LOCATION.--Lat 35°38'50", long 78°24'21", Johnston County, at gaging station on left bank at bridge on State Highway 42, 2.3 miles upstream from Mill Creek, and 3 miles east of Clayton.

DRAINAGE AREA.--1,140 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1943 to September 1944, water years 1964-73 (partial-record station).
Water temperatures: October 1943 to September 1944.

EXTREMES.--1943-44, 1955-56:
Dissolved solids: Maximum, 103 mg/l Jan. 1-10, 21-31, 1956; minimum, 47 mg/l Feb. 11-20, 1944.
Hardness: Maximum, 26 mg/l Oct. 1-10, 1943; minimum, 14 mg/l Feb. 11-20, 21-31, Apr. 11-20, 1944.
Water temperatures: Maximum, 29.5°C June 18, July 25-28, 1944; minimum, freezing point Dec. 19, 1943.

REMARKS.--Miscellaneous chemical data published for water years 1947, 1949, 1955, 1958-63. Unpublished data for October 1955 to February 1956 are available in district office at Raleigh.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
JAN.												
16...	1250	1470	14	--	0	--	5.7	2.3	10	1.4	22	0
16...A	1250	1470	--	--	--	--	--	--	--	--	--	--
AUG.												
29...	1330	330	16	1000	280	100	7.3	2.6	14	3.0	36	0
29...A	1330	330	--	--	--	--	--	--	--	--	42	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
JAN.											
16...	18	10	13	.0	.50	--	--	--	--	.11	72
16...A	--	--	--	--	--	--	--	--	--	--	--
AUG.											
29...	30	9.0	14	.4	--	.90	.25	1.1	8.9	.90	92
29...A	34	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
JAN.											
16...	70	.10	286	24	6	46	.9	110	6.5	--	--
16...A	--	--	--	--	--	--	--	--	6.3	5.0	--
AUG.											
29...	84	.13	89.4	29	0	48	1.1	138	7.3	--	--
29...A	--	--	--	--	--	--	--	150	6.1	25.5	37.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)
JAN.									
16...	10	--	--	11	--	--	.14	--	--
16...A	--	--	13.0	--	--	--	--	--	--
AUG.									
29...	--	20	--	2.9	10	8.5	--	4	0
29...A	--	--	--	53	--	--	--	--	--

DATE	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN.									
16...	--	--	--	--	--	<.5	--	--	--
16...A	--	--	--	--	--	--	--	--	--
AUG.									
29...	0	0	0	9	5	.0	.0	4	10
29...A	--	--	--	--	--	--	--	--	--

02087500 NEUSE RIVER NEAR CLAYTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	TOTAL IRON IN BOTTOM DE-POSITS (UG/G)	TOTAL MANGA-NESE IN BOTTOM DE-POSITS (UG/G)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)
AUG. 29...	1200	56	.0	60	1.6	1	0	10	2	2

	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)
AUG. 29...	S	.03	0.S	11

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
FEB.				
02...	1730	6690	854	15400
03...	0910	11900	492	15800
03...	1235	13100	307	10900
05...	0935	12000	146	4730
05...	1306	11500	181	5620
06...	1400	10500	183	5190
AUG.				
29...	1330	330	41	37

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
FEB.							
03...	1235	13100	307	10900	51	70	77

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
FEB.							
03...	81	83	84	86	89	96	100

02089116 NEUSE RIVER NEAR WHITEHALL, N. C.

LOCATION.--Lat 35°15'40", long 77°54'40", Wayne County, at bridge on State Highway 111, 1.5 miles downstream from Sleepy Creek, and 4.2 miles northwest of Whitehall.

DRAINAGE AREA.--2,460 sq mi, approximately.

PERIOD OF RECORD.--Water years 1970-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
12...	1630	2800	11	172	4.4	1.8	7.7	2.0	16	0
12... A	1630	2800	--	--	--	--	--	--	--	--
MAR.										
13...	1715	8100	6.7	0	4.0	1.5	5.8	1.8	15	0
13... A	1715	8100	--	--	--	--	--	--	--	--
MAY										
07...	1645	4700	11	--	4.6	1.8	7.5	2.0	17	0
07... A	1645	4700	--	--	--	--	--	--	20	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
12...	13	9.4	9.2	.4	--	.70	--	.069	62	57
12...A	15	--	--	--	--	--	--	--	--	--
MAR.										
13...	12	9.0	6.1	.2	--	.04	--	.028	52	42
13...A	11	--	--	--	--	--	--	--	--	--
MAY										
07...	14	8.0	8.0	.3	.8	--	.007	.12	62	52
07...A	16	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
12...	.08	469	19	6	44	.8	80	6.7	--	--
12...A	--	--	--	--	--	--	90	6.2	12.5	8.0
MAR.										
13...	.07	1140	16	4	41	.6	67	6.3	--	--
13...A	--	--	--	--	--	--	74	6.1	15.5	23.7
MAY										
07...	.08	787	19	5	43	.8	82	6.3	--	--
07...A	--	--	--	--	--	--	85	6.2	18.0	27.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
12...	30	--	5.1	.08	--
12...A	--	9.5	--	--	--
MAR.					
13...	55	--	12	.08	--
13...A	--	8.6	--	--	--
MAY					
07...	50	--	14	.14	10
07...A	--	8.3	20	--	--

02091764 CONTENTNEA CREEK AT GRIFTON, N. C.

LOCATION.--Lat 35°22'00", long 77°26'30", Pitt County, at bridge on State Highway 11, 0.5 mile southwest of Grifton, and 4.7 miles upstream from mouth.

DRAINAGE AREA.--980 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for water year 1949.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
12...	1530	7600	9.7	274	5.6	2.0	7.1	2.1	12	0
12...A	1530	7600	--	--	--	--	--	--	--	--
MAR.										
13...	1515	1800	5.1	0	4.7	1.4	5.9	1.9	10	0
13...A	1515	1800	--	--	--	--	--	--	--	--
MAY										
07...	1530	750	7.0	--	5.3	1.5	6.4	2.4	10	0
07...A	1530	750	--	--	--	--	--	--	14	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHOROS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
12...	10	11	11	.4	--	1.1	--	.11	68	60
12...A	11	--	--	--	--	--	--	--	--	--
MAR.										
13...	8	9.0	8.6	.3	--	.72	--	.000	62	45
13...A	7	--	--	--	--	--	--	--	--	--
MAY										
07...	8	8.0	7.5	.3	1.1	--	.007	.14	65	48
07...A	11	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
12...	.09	1400	22	12	38	.7	87	6.4	--	--
12...A	--	--	--	--	--	--	90	6.2	12.0	9.0
MAR.										
13...	.08	301	18	10	39	.6	71	6.1	--	--
13...A	--	--	--	--	--	--	80	6.1	16.5	25.5
MAY										
07...	.09	132	19	11	38	.6	78	5.9	--	--
07...A	--	--	--	--	--	--	80	6.2	18.0	28.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
12...	50	--	7.6	.09	--
12...A	--	8.3	--	--	--
MAR.					
13...	50	--	13	.00	--
13...A	--	8.0	--	--	--
MAY					
07...	50	--	20	.15	20
07...A	--	7.7	14	--	--

02091836 NEUSE RIVER AT STREETS FERRY NEAR VANCEBORO, N. C.
(Radiochemical station)

LOCATION.--Lat 35°12'20", long 77°07'40", Craven County, at bridge on Secondary Road 1400 at Streets Ferry, 1.4 miles above the Gut, and 7 miles south of Vanceboro.

DRAINAGE AREA.--4,040 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1954 to September 1966, water years 1969-73 (partial-record station). Water temperatures: October 1954 to September 1964.

EXTREMES.--1954-66:
Chloride: Maximum, 6,630 mg/l Oct. 15, 1954; minimum, 3.0 mg/l June 22-30, 1961.
Specific conductance: Maximum daily, 17,800 micromhos Oct. 15, 1954; minimum daily, 25 micromhos Mar. 11, 1966.
Water temperatures: Maximum, 33.5°C June 29, 30 (T), 1959, and July 7, 22 (T), 1962; minimum, 0.5°C Feb. 19 (B), 1958.

REMARKS.--Tritium determinations for period January to September 1973 were not available at time of this publication because of technical problems. Salinity station prior to October 1966; chemical analyses and temperature values were determined on integrated samples collected three times daily from September 1954 to September 1957, and top (T) and bottom (B) samples collected once daily from October 1957 to September 1964. Extremes were not published during water years 1965-66 due to insufficient data; however, for the period-of-record extremes, the minimum specific conductance occurred in water year 1966. Daily records of specific conductance for water years 1954-64 available in files of district office in Raleigh, N. C. Records prior to water year 1958 published as Neuse River near Vanceboro.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	TEMPERATURE (DEG C)	TRITIUM IN WATER MOLECULES (UNITS)	TRITIUM IN WATER MOLECULES (COUNT. ERROR)
OCT.				
12...	1800	18.0	64.5	3.9
NOV.				
12...	1622	15.0	62.7	3.8
DEC.				
26...	1040	8.0	51.6	3.2

02092162 NEUSE RIVER AT NEW BERN, N. C.
(Radiochemical station)

LOCATION.--Lat 35°06'42", long 77°01'37", Craven County, at bridge on U.S. Highway 17 at New Bern, and 0.9 mile upstream from Trent River.

DRAINAGE AREA.--4,470 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1967, water years 1968-69 (partial-record station), October 1969 to June 1973 (discontinued).
Water temperatures: October 1956 to September 1967.

EXTREMES.--1956-67:
Specific conductance: Maximum daily, 27,400 micromhos Jan. 30 (T), 1966; minimum daily, 46 micromhos Oct. 15, 1964.
Chloride: Maximum, 10,300 mg/l Jan. 30 (T), 1966; minimum, 4.5 mg/l on several days in June, July 1961, and August 1965.
Water temperatures: Maximum, 31.5°C June 17, 22, and Aug. 3, 18 (T), 1957; minimum, 0.5°C Feb. 18 (T), 19, 20, 1958, and Feb. 1 (T), 1966.

REMARKS.--Salinity station prior to October 1967; top (T) and bottom (B) samples were collected once daily. Miscellaneous chemical data published for water years 1947, 1951.

02092162 NEUSE RIVER AT NEW BERN, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.										
26...A	1345	--	--	--	--	--	--	--	--	--
NOV.										
29...	0900	7.7	83	6.7	1.6	10	2.6	19	0	16
29...A	0900	--	--	--	--	--	--	--	--	13
JAN.										
24...A	0930	--	--	--	--	--	--	--	--	--
MAR.										
22...	0930	6.3	0	6.2	1.8	8.3	2.0	18	0	15
22...A	0930	--	--	--	--	--	--	--	--	14
APR.										
18...A	1400	--	--	--	--	--	--	--	--	--
MAY										
16...	0930	7.0	--	18	25	220	10	32	0	26
16...A	0930	--	--	--	--	--	--	35	0	29
JUNE										
20...A	0900	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.									
26...A	--	--	--	--	--	--	--	--	--
NOV.									
29...	14	14	.1	--	.00	--	.020	90	66
29...A	--	--	--	--	--	--	--	--	--
JAN.									
24...A	--	--	--	--	--	--	--	--	--
MAR.									
22...	8.8	13	.4	--	.61	--	.081	70	59
22...A	--	--	--	--	--	--	--	--	--
APR.									
18...A	--	--	--	--	--	--	--	--	--
MAY									
16...	62	380	.3	.5	--	.004	.090	822	738
16...A	--	--	--	--	--	--	--	--	--
JUNE									
20...A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
26...A	--	--	--	--	--	2000	6.5	16.0	15.0
NOV.									
29...	.12	23	8	45	.9	185	6.3	--	--
29...A	--	--	--	--	--	120	6.7	9.0	7.5
JAN.									
24...A	--	--	--	--	--	120	6.4	8.9	11.0
MAR.									
22...	.10	23	8	42	.8	98	6.3	--	--
22...A	--	--	--	--	--	100	6.4	11.5	5.6
APR.									
18...A	--	--	--	--	--	90	6.5	16.5	22.5
MAY									
16...	1.12	150	120	75	7.9	1420	7.0	--	--
16...A	--	--	--	--	--	1450	6.7	21.0	17.0
JUNE									
20...A	--	--	--	--	--	700	6.8	27.0	27.1

02092162 NEUSE RIVER AT NEW BERN, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEMICAL OXYGEN DEMAND (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHYLENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	TOTAL ALPHA (PC/L)	TOTAL ALPHA (COUNTING ERROR)	DIS-SOLVED ALPHA (PC/L)	DIS-SOLVED ALPHA (COUNTING ERROR)
OCT.											
26...	--	--	2.0	--	--	--	--	.0	1.8	.0	1.8
26...A	--	6.9	--	--	100	--	--	--	--	--	--
NOV.											
29...	150	--	--	15	--	.09	--	1.1	1.2	1.0	1.1
29...A	--	9.4	--	--	100	--	--	--	--	--	--
JAN.											
24...	--	--	--	--	--	--	--	2.4	1.4	.9	.9
24...A	--	11.0	--	--	40	--	--	--	--	--	--
MAR.											
22...	70	--	--	14	--	.03	--	.7	.5	.4	.4
22...A	--	10.2	--	--	60	--	--	--	--	--	--
APR.											
18...	--	--	--	--	--	--	--	.3	.4	.0	.3
18...A	--	9.4	--	--	250	--	--	--	--	--	--
MAY											
16...	80	--	6.7	5.1	--	.14	40	.4	.6	.2	.7
16...A	--	7.8	--	11	20	--	--	--	--	--	--
JUNE											
20...	--	--	1.6	--	--	--	--	.7	.5	.5	.4
20...A	--	6.2	--	--	80	--	--	--	--	--	--

DATE	SUS-PENDED ALPHA (PC/L)	SUS-PENDED ALPHA (COUNTING ERROR)	TOTAL BETA (PC/L)	TOTAL BETA (COUNTING ERROR)	DIS-SOLVED BETA (PC/L)	DIS-SOLVED BETA (COUNTING ERROR)	SUS-PENDED BETA (PC/L)	SUS-PENDED BETA (COUNTING ERROR)	TOTAL STRONTIUM 89 (PC/L)	TOTAL STRONTIUM 90 (PC/L)
OCT.										
26...	.0	.5	14	2.2	13	2.0	1.0	.8	<5.0	<1.0
26...A	--	--	--	--	--	--	--	--	--	--
NOV.										
29...	.1	.1	3.3	1.5	3.0	1.2	.3	.9	<5.0	<1.0
29...A	--	--	--	--	--	--	--	--	--	--
JAN.										
24...	1.5	1.0	2.3	1.6	1.2	1.2	1.1	1.1	<5.0	<1.0
24...A	--	--	--	--	--	--	--	--	--	--
MAR.										
22...	.3	.2	1.6	.5	1.0	.3	.6	.3	<5.0	<1.0
22...A	--	--	--	--	--	--	--	--	--	--
APR.										
18...	.3	.2	1.2	.5	1.2	.3	.0	.2	<5.0	<1.0
18...A	--	--	--	--	--	--	--	--	--	--
MAY										
16...	.1	.2	1.3	.5	1.3	.6	.0	.2	<5.0	<1.0
16...A	--	--	--	--	--	--	--	--	--	--
JUNE										
20...	.2	.2	2.3	.5	2.0	.5	.3	.2	<5.0	<1.0
20...A	--	--	--	--	--	--	--	--	--	--

NEUSE RIVER BASIN

02092554 TRENT RIVER AT POLLOCKSVILLE, N. C.

LOCATION.--Lat 35°00'35", long 77°13'10", Jones County, at bridge on U.S. Highway 17, 0.2 mile northeast of Pollocksville, and 0.4 mile upstream from Mill Creek.

DRAINAGE AREA.--370 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: January 1955 to November 1958, October 1961 to May 1967, water years 1968-73 (discontinued, partial-record station).
Water temperatures: January 1955 to November 1958, October 1961 to September 1967.

EXTREMES.--1955-58, 1961-67:
Specific conductance: Maximum daily, 9,230 micromhos Jan. 19, 1955; minimum daily, 36 micromhos Sept. 22,2 23, 1955.
Chloride: Maximum, 3,050 mg/l Jan. 19, 1955; minimum, 2.5 mg/l June 28-30, 1965.
Dissolved solids: Maximum, 5,080 mg/l Jan. 1-8, 1955; minimum, 37 mg/l June 28-30, 1965.
Water temperatures: Maximum, 31.0°C June 7, 1956; minimum, freezing point on many days in 1957, 1958 and 1966.

REMARKS.--Salinity station prior to October 1967; samples collected once daily. Unpublished records of specific conductance of daily samples January 1955 to September 1958 available in district office at Raleigh. Records of chemical analyses and daily specific conductance and water temperature collected at site 2.7 miles downstream December 1958 to September 1959 were published as Trent River below Mill Creek near Pollocksville. Miscellaneous chemical data for that site published for water year 1949.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.									
18...	1400	9.0	0	27	4.6	4.5	1.2	86	0
18...A	1400	--	--	--	--	--	--	--	--

02092554 TRENT RIVER AT POLLOCKSVILLE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKALINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.									
18...	71	13	7.0	.2	.10	.000	124	110	.17
18... A	--	--	--	--	--	--	--	--	--

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.								
18...	37	15	10	.2	190	7.0	--	--
18... A	--	--	--	--	--	5.9	23.0	21.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT.				
18...	70	--	14	.12
18... A	--	5.7	--	--

WHITE OAK RIVER BASIN

02092744 WHITE OAK RIVER AT STELLA, N. C.

LOCATION.--Lat 34°46'28", long 77°09'14", Carteret County, at bridge 0.2 mile west of Stella, 1.0 mile upstream from Webb Creek.

DRAINAGE AREA.--216 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
DEC.										
13...	0845	6.8	297	8.9	5.6	14	.8	22	0	18
13... A	0845	--	--	--	--	--	--	--	--	16
JAN.										
24...	1200	5.3	0	10	2.0	14	1.0	24	0	20
24... A	1200	--	--	--	--	--	--	--	--	17
MAY										
16...	1210	4.0	--	38	74	610	24	41	0	34
16... A	1210	--	--	--	--	--	--	42	0	34

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.									
13...	25	23	.8	--	.20	--	.039	113	97
13... A	--	--	--	--	--	--	--	--	--
JAN.									
24...	9.8	24	.5	--	.11	--	.039	87	79
24... A	--	--	--	--	--	--	--	--	--
MAY									
16...	140	1100	.3	.1	--	.007	.050	--	2000
16... A	--	--	--	--	--	--	--	--	--

02092744 WHITE OAK RIVER AT STELLA, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
13...	.15	45	27	40	.9	144	6.3	--	--
13... A	--	--	--	--	--	155	5.9	13.5	11.5
JAN.									
24...	.12	33	14	47	1.1	144	6.4	--	--
24... A	--	--	--	--	--	160	6.7	9.5	11.5
MAY									
16...	2.72	400	370	76	13	3960	6.5	--	--
16... A	--	--	--	--	--	3500	6.9	23.0	20.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.						
13...	350	--	18	--	.07	--
13... A	--	7.5	--	--	--	--
JAN.						
24...	500	--	15	--	.04	--
24... A	--	7.7	--	--	--	--
MAY						
16...	200	--	21	--	.12	1000
16... A	--	7.5	8.5	0	--	--

WHITE OAK RIVER BASIN

02092760 WHITE OAK RIVER AT SWANSBORO, N. C.

LOCATION.--Lat 35°40'59", long 77°06'51", Onslow County, at mouth, at bridge on State Highway 24, at Swansboro.

DRAINAGE AREA.--280 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water year 1971 (partial-record station), October 1971 to June 1973 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	TIDE STAGE CODE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
26... A	0900	4110	--	--	--	--	--	--	--	--
NOV.										
29...	1245	--	2.1	49	219	663	5450	210	92	0
29... A	1245	3310	--	--	--	--	--	--	--	--
JAN.										
24... A	1345	4210	--	--	--	--	--	--	--	--
MAR.										
22...	1215	--	.8	0	308	988	7900	250	60	0
22... A	1215	1410	--	--	--	--	--	--	--	--
APR.										
18... A	1145	1340	--	--	--	--	--	--	--	--
MAY										
16...	1330	--	.0	--	350	1000	9000	360	126	0
16... A	1330	5410	--	--	--	--	--	--	136	0
JUNE										
20... A	1100	5310	--	--	--	--	--	--	--	--

02092760 WHITE OAK RIVER AT SWANSBORO, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
26... A	--	--	--	--	--	--	--	--	--	--
NOV.										
29...	75	1340	10200	.8	--	.00	--	.030	19700	18200
29... A	83	--	--	--	--	--	--	--	--	--
JAN.										
24... A	--	--	--	--	--	--	--	--	--	--
MAR.										
22...	49	204	15000	1.4	--	.04	--	.000	27800	24700
22... A	--	--	--	--	--	--	--	--	--	--
APR.										
18... A	--	--	--	--	--	--	--	--	--	--
MAY										
16...	103	2300	16300	1.4	.1	--	.000	.040	--	29400
16... A	112	--	--	--	--	--	--	--	--	--
JUNE										
20... A	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
26... A	--	--	--	--	--	22000	7.2	16.0	14.0
NOV.									
29...	26.8	3100	3030	77	41	24000	7.0	--	--
29... A	--	--	--	--	--	--	7.2	10.0	9.5
JAN.									
24... A	--	--	--	--	--	28000	7.8	11.0	14.3
MAR.									
22...	37.8	4830	4780	77	49	40000	7.7	--	--
22... A	--	--	--	--	--	--	7.8	11.5	7.0
APR.									
18... A	--	--	--	--	--	28000	7.7	20.0	22.5
MAY									
16...	40.0	5000	4900	78	55	44900	7.7	--	--
16... A	--	--	--	--	--	26000	8.0	22.0	23.5
JUNE									
20... A	--	--	--	--	--	30000	7.8	27.3	27.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.						
26... A	--	9.5	--	4	--	--
NOV.						
29...	65	--	15	--	.58	--
29... A	--	11.4	--	40	--	--
JAN.						
24... A	--	9.8	--	32	--	--
MAR.						
22...	30	--	1.9	--	.64	--
22... A	--	11.3	--	52	--	--
APR.						
18... A	--	10.6	--	38	--	--
MAY						
16...	30	--	4.0	--	.17	7500
16... A	--	9.6	2.2	0	--	--
JUNE						
20... A	--	7.1	--	320	--	--

02093032 NEW RIVER AT JACKSONVILLE, N. C.

LOCATION.--Lat 34°45'13", long 77°26'06", Onslow County, at bridge on U.S. Highway 17 at Jacksonville, and 0.3 mile downstream from Deep Gully Creek.

DRAINAGE AREA.--160 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1960 to September 1961, water years 1968-69, 1972-73 (discontinued, partial-record station), October 1969 to September 1971.
Water temperatures: October 1960 to September 1961.

EXTREMES.--1960-61:
Specific conductance: Maximum daily, 19,800 micromhos Dec. 5, 1960; minimum daily, 60 micromhos July 1, 1961.
Chloride: Maximum, 7,380 mg/l Sept. 26, 1961; minimum, 7.5 mg/l July 1-3, 1961.
Water temperatures: Maximum, 34.0°C July 31, 1961; minimum, 1.0°C Dec. 14, 1960.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
DEC.										
13...	0930	7.1	271	17	9.6	68	3.6	44	0	36
13... A	0930	--	--	--	--	--	--	--	--	36
JAN.										
24...	1650	5.5	0	11	3.2	21	1.9	32	0	26
24... A	1650	--	--	--	--	--	--	--	--	24
MAY										
16...	1525	4.0	--	70	80	270	12	55	0	45
16... A	1525	--	--	--	--	--	--	60	0	49

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.									
13...	22	126	.6	--	.50	--	.11	296	279
13... A	--	--	--	--	--	--	--	--	--
JAN.									
24...	11	34	.2	--	.40	--	.15	116	106
24... A	--	--	--	--	--	--	--	--	--
MAY									
16...	84	650	.3	.4	--	.005	.10	1160	1200
16... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
13...	.40	82	46	63	3.3	525	6.5	--	--
13... A	--	--	--	--	--	465	6.4	13.0	12.0
JAN.									
24...	.16	41	15	51	1.4	192	6.4	--	--
24... A	--	--	--	--	--	200	6.3	11.0	14.5
MAY									
16...	1.58	510	460	53	5.2	1920	6.9	--	--
16... A	--	--	--	--	--	2000	7.0	22.5	23.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
13...	180	--	22	.10	--
13... A	--	9.4	--	--	--
JAN.					
24...	140	--	20	.07	--
24... A	--	9.4	--	--	--
MAY					
16...	120	--	11	.13	1200
16... A	--	8.4	9.6	--	--

02093197 NEW RIVER NEAR SNEEDS FERRY, N. C.

LOCATION.--Lat 34°34'41", long 77°24'58", Onslow County, at drawbridge on State Highway 172, 1.9 miles north of Sneeds Ferry, and 5.1 miles upstream from mouth.

DRAINAGE AREA.--430 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-71 (partial-record station), October 1971 to June 1973 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	TIDE STAGE CODE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
25...A	1645	4110	--	--	--	--	--	--	--	--
NOV.										
29...B	1500	--	1.5	59	288	849	7500	270	116	0
29...A	1500	5610	--	--	--	--	--	--	--	--
29...C	1515	--	1.5	56	324	861	7300	270	114	0
29...A	1515	5610	--	--	--	--	--	--	--	--
29...D	1530	--	1.5	55	296	910	7600	270	115	0
29...A	1530	5610	--	--	--	--	--	--	--	--
JAN.										
24...A	1520	1310	--	--	--	--	--	--	--	--
MAR.										
22...B	1515	--	.4	0	180	501	4800	120	40	0
22...A	1515	5510	--	--	--	--	--	--	--	--
22...C	1530	--	1.0	0	176	451	4800	120	37	0
22...A	1530	5510	--	--	--	--	--	--	--	--
22...D	1545	--	1.5	0	156	504	4400	120	20	0
22...A	1545	5310	--	--	--	--	--	--	--	--
APR.										
18...A	0930	4110	--	--	--	--	--	--	--	--
MAY										
16...	1730	--	1.0	--	180	550	4800	200	78	0
16...A	1730	3210	--	--	--	--	--	--	84	0
JUNE										
20...A	1200	4110	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
25...A	--	--	--	--	--	--	--	--	--	--
NOV.										
29...B	95	1840	13200	1.4	.00	--	--	.10	24800	24100
29...A	106	--	--	--	--	.00	--	--	--	--
29...C	94	1860	13200	1.4	.00	--	--	.024	24700	23900
29...A	98	--	--	--	--	.00	--	--	--	--
29...D	94	1860	13200	1.4	.00	--	--	.012	25600	24200
29...A	98	--	--	--	--	.00	--	--	--	--
JAN.										
24...A	--	--	--	--	--	--	--	--	--	--
MAR.										
22...B	33	1260	8300	.9	--	.02	--	.000	15400	15200
22...A	--	--	--	--	--	--	--	--	--	--
22...C	30	1220	8040	.9	--	.02	--	.000	15000	14800
22...A	--	--	--	--	--	--	--	--	--	--
22...D	16	1270	7880	.9	--	.04	--	.000	14400	14400
22...A	--	--	--	--	--	--	--	--	--	--
APR.										
18...A	--	--	--	--	--	--	--	--	--	--
MAY										
16...	64	1200	8300	.8	.00	--	.13	.030	--	15300
16...A	69	--	--	--	--	--	--	--	--	--
JUNE										
20...A	--	--	--	--	--	--	--	--	--	--

A Field analysis.
B Sample collected at quarter-point nearest left bank.
C Sample collected at midpoint of stream.
D Sample collected at quarter-point nearest right bank.

02093197 NEW RIVER NEAR SNEEDS FERRY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
25...A	--	--	--	--	--	18000	7.5	17.0	19.0
NOV.									
29...B	33.7	4210	4120	78	50	37000	7.2	--	--
29...A	--	--	--	--	--	--	7.6	9.5	8.3
29...C	33.6	4350	4260	77	48	37000	7.2	--	--
29...A	--	--	--	--	--	--	7.6	9.5	8.3
29...D	34.8	4480	4390	77	49	37000	7.2	--	--
29...A	--	--	--	--	--	--	7.7	9.5	8.3
JAN.									
24...A	--	--	--	--	--	20000	8.0	11.0	14.0
MAR.									
22...B	20.9	2500	2480	80	42	23500	7.5	--	--
22...A	--	--	--	--	--	--	7.0	12.0	13.5
22...C	20.4	2290	2260	81	44	23000	7.4	--	--
22...A	--	--	--	--	--	--	7.0	12.0	13.5
22...D	19.6	2460	2430	79	39	22200	8.0	--	--
22...A	--	--	--	--	--	--	7.0	12.0	13.5
APR.									
18...A	--	--	--	--	--	20000	7.4	18.0	21.5
MAY									
16...	20.8	2700	2700	78	40	24900	6.6	--	--
16...A	--	--	--	--	--	--	7.4	22.5	23.5
JUNE									
20...A	--	--	--	--	--	23000	7.9	28.0	30.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.						
25...A	--	10.5	--	156	--	--
NOV.						
29...B	10	--	12	--	.02	--
29...A	--	10.5	--	--	--	--
29...C	15	--	12	--	.04	--
29...A	--	10.5	--	4	--	--
29...D	20	--	12	--	.03	--
29...A	--	10.5	--	--	--	--
JAN.						
24...A	--	12.4	--	0	--	--
MAR.						
22...B	30	--	2.0	--	.71	--
22...C	30	--	2.4	--	.38	--
22...A	--	11.4	--	8	--	--
22...D	30	--	.3	--	.62	--
APR.						
18...A	--	9.2	--	16	--	--
MAY						
16...	40	--	31	--	.18	4500
16...A	--	9.4	5.4	0	--	--
JUNE						
20...A	--	7.9	--	<1	--	--

A Field analysis.
B Sample collected at quarter-point nearest left bank.
C Sample collected at midpoint of stream.
D Sample collected at quarter-point nearest right bank.

02097000 HAW RIVER NEAR PITTSBORO, N. C.

LOCATION.--Lat 35°42'07", long 79°05'12", Chatham County, at gaging station on left bank 100 ft upstream from Robeson Creek, 1,000 ft downstream from bridge on Secondary Road 1943, 2 miles downstream from bridge on U.S. Highway 64, and 5 miles east of Pittsboro.

DRAINAGE AREA.--1,310 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for water years 1954-67. Records of chemical analyses and daily water temperatures at station upstream, Haw River at Bynum, drainage area 1,280 sq mi, published for October 1955 to September 1967.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
16...	1000	1500	14	0	7.9	3.5	18	3.5	44	0
16... A	1000	1500	--	--	--	--	--	--	--	--
JAN.										
24...	0940	2890	13	0	7.6	2.4	15	2.5	32	0
24... A	0940	2890	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
NOV.									
16...	36	14	16	.5	.90	.37	108	105	.15
16... A	35	--	--	--	--	--	--	--	--
JAN.									
24...	26	14	14	.3	1.3	.26	93	91	.13
24... A	32	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.									
16...	437	34	0	50	1.3	155	7.3	--	--
16... A	--	--	--	--	--	--	6.9	10.0	10.0
JAN.									
24...	726	29	3	50	1.2	140	6.7	--	--
24... A	--	--	--	--	--	--	7.2	6.0	4.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV.											
16...	5	--	3.5	.06	--	--	--	--	--	3.4	--
16...A	--	12.0	--	--	--	--	--	--	--	--	--
JAN.											
24...	50	--	10	.23	<10	<50	<50	<100	<100	<.5	<50
24...A	--	14.0	--	--	--	--	--	--	--	--	--

02097000 HAW RIVER NEAR PITTSBORO, N. C.--Continued

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAY				
29...	1310	8920	575	13800
JUNE				
29...	1200	18200	997	49000

CAPE FEAR RIVER BASIN

02098206 HAW RIVER NEAR MONCURE, N. C.

LOCATION.--Lat 35°37'48", long 79°03'36", Chatham County, at bridge on U.S. Highway 1, 1.1 miles northeast of Moncure, 1.3 miles downstream from gaging station, and 2.6 miles upstream from confluence with Deep River.

DRAINAGE AREA.--1,700 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1960 to September 1961, July 1969 to September 1971, water years 1972-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for water year 1946. Prior to October 1961 samples collected at site, 02098208 Haw River at Moncure, at old U.S. Highway 1 bridge, 1.1 miles downstream. Records of discharge are given for 02098200 Haw River near Haywood.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
16...	1200	2340	13	0	7.1	3	12	3.2	37	0
16...A	1200	2340	--	--	--	--	--	--	--	--
JAN.										
24...	1045	3700	11	0	6.7	3.6	12	2.0	29	0
24...A	1045	3700	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
NOV.									
16...	30	12	13	.4	.50	.23	87	85	.12
16...A	40	--	--	--	--	--	--	--	--
JAN.									
24...	24	13	12	.4	.80	.35	87	79	.12
24...A	17	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.									
16...	550	32	2	42	.9	130	6.8	--	--
16...A	--	--	--	--	--	--	6.8	12.0	10.0
JAN.									
24...	869	32	8	43	.9	128	6.4	--	--
24...A	--	--	--	--	--	--	6.5	7.0	7.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV.											
16...	35	--	9.4	.09	--	--	--	--	--	2.9	--
16...A	--	11.4	--	--	--	--	--	--	--	--	--
JAN.											
24...	5	--	7.4	.05	<10	<50	<50	<100	<100	<.5	<50
24...A	--	12.8	--	--	--	--	--	--	--	--	--

02102049 DEEP RIVER AT U.S. HIGHWAY 1, AT MONCURE, N. C.

LOCATION.--Lat 35°37'09", long 79°05'38", Chatham County, at bridge on U.S. Highway 1, 1 mile west of Moncure, 1.2 miles downstream from gaging station, and 3 miles upstream from Haw River.

DRAINAGE AREA.--1,420 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1943 to September 1944, October 1955 to September 1956, October 1961 to September 1967, water years 1968-69, 1972-73 (discontinued, partial record station), October 1969 to September 1971. Prior to October 1965, published as 02102000 Deep River at Moncure.
Water temperatures: October 1943 to September 1944, October 1955 to September 1956, October 1961 to September 1967.

EXTREMES.--1943-44, 1955-56, 1961-67:
Dissolved solids: Maximum, 114 mg/l Oct. 1-7, 1962;minimum, 35 mg/l (calculated) Feb. 25-27, 1966.
Hardness: Maximum, 35 mg/l Nov. 1-30, 1961; minimum, 12 mg/l on many days in 1944 and 1956.
Specific conductance (1955-56, 1961-67): Maximum daily, 443 micromhos Feb. 1, 1966; minimum daily, 25 micromhos July 21, 1956.
Water temperatures: Maximum, 34.5°C July 3, 1956; minimum, freezing point Jan. 29, 1963, Jan. 15, 1964, and Jan. 29, 1966.

REMARKS.--Miscellaneous chemical data published for water years 1947, 1955, 1957-61. Records of discharge are given for 02102000 Deep River at Moncure. No appreciable inflow between sampling point and gaging station except during periods of heavy local runoff.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
16...	1120	1660	11	0	6.1	2.8	10	3.8	28	0
16... A	1120	1660	--	--	--	--	--	--	--	--
JAN.										
24...	1130	1740	9.2	0	4.1	1.7	5.4	1.3	13	0
24... A	1130	1740	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
NOV.									
16...	23	9.8	13	.3	.70	.25	84	75	.11
16... A	--	--	--	--	--	--	--	--	--
JAN.									
24...	11	7.4	6.6	.3	.30	.070	52	44	.07
24... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.									
16...	376	27	4	41	.5	115	6.9	--	--
16... A	--	--	--	--	--	--	6.4	12.0	10.0
JAN.									
24...	244	17	6	39	.6	65	5.9	--	--
24... A	--	--	--	--	--	--	7.2	6.5	7.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
NOV.											
16...	3	--	5.6	.09	--	--	--	--	--	3.5	--
16... A	--	10.3	--	--	--	--	--	--	--	--	--
JAN.											
24...	70	--	26	.05	10	<50	<50	<100	<100	<.5	<50
24... A	--	13.5	--	--	--	--	--	--	--	--	--

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
MAY				
29...	1020	1520	11	45
29...	1335	3690	56	558

02102500 CAPE FEAR RIVER AT LILLINGTON, N. C.

LOCATION.--Lat 35°24'30", long 78°48'48", Harnett County, at gaging station near right bank of downstream bridge on U.S. Highway 401, 1,800 ft downstream from Norfolk Southern Railway bridge, 0.5 mile north of Lillington, 1 mile downstream from Neal Creek, and at mile 178.

DRAINAGE AREA.--3,440 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: November 1944 to October 1945, October 1954 to September 1955, November 1960 to September 1967, water years 1968-69, 1972-73 (discontinued, partial-record station), October 1969 to September 1971.
Water temperatures: November 1944 to October 1945, October 1954 to September 1955, June 1959 to September 1967.

EXTREMES.--1944-45, 1954-55, 1959-67:
Dissolved solids (1944-45, 1954-55): Maximum, 176 mg/l Oct. 11-15, 1954; minimum, 48 mg/l Feb. 20-28, Mar. 1-10, 1945.
Hardness (1944-45, 1954-55): Maximum, 34 mg/l Oct. 11-15, 1954; minimum, 10 mg/l Oct. 21-31, 1954.
Specific conductance (1954-55): Maximum daily, 272 micromhos Oct. 11, 1954 (figures for Oct. 1-10, Oct. 11-15, 1954, of 279 and 300 micromhos, respectively, are in error and should be less than 272); minimum, daily, 41.1 micromhos Sept. 4, 1955.
Water temperatures: Maximum, 35.5°C June 30, 1959; minimum, 0.5°C on several days in January and February 1966.

REMARKS.--Miscellaneous chemical data published for water years 1947, 1949, 1956-58.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
OCT.									
09...	1230	--	8.8	0	4.9	2.0	8.9	2.6	21
09... A	1230	--	--	--	--	--	--	--	--
JAN.									
16...	1110	5250	15	0	6.2	2.9	14	1.9	22
16... A	1110	5250	--	--	--	--	--	--	--

DATE	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.									
09...	0	17	9.8	8.6	.3	.36	.17	82	59
09... A	--	--	--	--	--	--	--	--	--
JAN.									
16...	0	18	10	19	.4	1.1	.23	86	66
16... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
OCT.									
09...	.11	--	20	3	45	.9	85	6.4	--
09... A	--	--	--	--	--	--	--	6.7	20.0
JAN.									
16...	.12	1220	28	10	51	1.2	132	6.6	--
16... A	--	--	--	--	--	--	--	6.1	5.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL MERCURY (HG) (UG/L)
OCT.									
09...	120	--	13	.07	--	--	--	--	--
09... A	--	8.6	--	--	--	--	--	--	--
JAN.									
16...	10	--	8.8	.05	<10	<40	<50	<100	<.5
16... A	--	13.3	--	--	--	--	--	--	--

02102500 CAPE FEAR RIVER AT LILLINGTON, N. C.--Continued

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
FEB.				
03...	1110	53200	220	31600
03...	1250	48500	314	41100
05...	1115	32900	162	14400
05...	1240	32700	154	13600
06...	1000	22300	80	4820

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
FEB.												
03...	1110	53200	220	31600	36	57	70	81	92	95	98	100

CAPE FEAR RIVER BASIN

02104000 CAPE FEAR RIVER AT FAYETTEVILLE, N. C.

LOCATION.--Lat 35°02'49", long 78°51'36", Cumberland County, at bridge on Person Street at Fayetteville, 0.3 mile downstream from Cross Creek, and at mile 145.

DRAINAGE AREA.--4,370 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1948 to September 1949, October 1964 to September 1967, water years 1968-73 (discontinued, partial-record station).

EXTREMES.--1948-49:
Dissolved solids: Maximum, 63 mg/l Mar. 15, 1949; minimum, 39 mg/l Jan. 15, 1949.
Hardness: Maximum, 21 mg/l Mar. 15, 1949; minimum, 11 mg/l May 15, 1949.

REMARKS.--Miscellaneous chemical data published for water years 1955, 1956, 1960-62.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
13...	1515	--	12	264	4.2	2.8	10	1.9	24	0
13... A	1515	--	--	--	--	--	--	--	--	--
MAR.										
28...	1400	6900	9.0	0	4.8	1.9	7.6	1.5	21	0
28... A	1400	6900	--	--	--	--	--	--	--	--
MAY										
08...	0830	4600	10	--	4.8	1.9	9.4	1.8	20	0
08... A	0830	4600	--	--	--	--	--	--	26	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
DEC.										
13...	20	8.0	11	.5	--	1.0	.12	70	68	.10
13... A	20	--	--	--	--	--	--	--	--	--
MAR.										
28...	17	6.2	7.6	.1	--	.60	.090	60	51	.08
28... A	16	--	--	--	--	--	--	--	--	--
MAY										
08...	16	8.0	7.5	.3	.9	--	--	66	58	.09
08... A	21	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
13...	--	22	3	47	.9	98	6.6	--	--
13... A	--	--	--	--	--	110	6.0	12.0	21.0
MAR.									
28...	1120	20	3	43	.7	78	6.5	--	--
28... A	--	--	--	--	--	82	6.7	13.0	17.5
MAY									
08...	820	20	4	48	.9	87	6.4	--	--
08... A	--	--	--	--	--	80	6.4	18.5	21.0

CAPE FEAR RIVER BASIN

02104000 CAPE FEAR RIVER AT FAYETTEVILLE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)
DEC.					
13...	25	--	9.6	.07	--
13... A	--	10.8	--	--	--
MAR.					
28...	60	--	11	.00	--
28... A	--	9.4	--	--	--
MAY					
08...	50	--	13	.12	60
08... A	--	8.2	17	--	--

CAPE FEAR RIVER BASIN

02105544 CAPE FEAR RIVER AT LOCK 2, NEAR ELIZABETHTOWN, N. C.

LOCATION.--Lat 34°37'37", long 78°34'44", Bladen County, at Lock No. 2, 1 mile upstream from Turnbull Creek, 1.75 miles east of Elizabethtown, and at mile 98.

DRAINAGE AREA.--4,980 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1971, water years 1972-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
13...	1215	--	10	20	4.0	2.0	9.3	1.5	19	0
13... A	1215	--	--	--	--	--	--	--	--	--
MAR.										
28...	1130	7900	8.2	0	4.5	1.7	6.6	1.2	18	0
28... A	1130	7900	--	--	--	--	--	--	--	--
MAY										
08...	1030	5200	10	--	4.4	1.8	7.6	1.5	17	0
08... A	1030	5200	--	--	--	--	--	--	20	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RES1-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
13...	16	9.8	9.1	.1	--	.70	--	.11	66	59
13... A	16	--	--	--	--	--	--	--	--	--
MAR.										
28...	15	8.8	7.1	.2	--	.50	--	.14	51	50
28... A	13	--	--	--	--	--	--	--	--	--
MAY										
08...	14	8.0	6.9	.2	.6	--	.009	.10	56	51
08... A	16	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
13...	.09	--	18	3	50	.9	87	6.4	--	--
13... A	--	--	--	--	--	--	90	6.1	12.0	14.2
MAR.										
28...	.07	1090	18	3	42	.7	72	6.4	--	--
28... A	--	--	--	--	--	--	78	6.7	12.5	18.0
MAY										
08...	.08	786	4	0	45	.8	77	6.4	--	--
08... A	--	--	--	--	--	--	68	6.1	19.5	23.0

02105544 CAPE FEAR RIVER AT LOCK 2, NEAR ELIZABETHTOWN, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)
DEC.					
13...	30	--	12	.05	--
13... A	--	10.4	--	--	--
MAR.					
28...	70	--	11	.00	--
28... A	--	10.2	--	--	--
MAY					
08...	50	--	11	.12	10
08... A	--	8.0	25	--	--

CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.

LOCATION.--Lat 34°24'15", long 78°17'38", Bladen County, water-quality recorder on right bank near downstream end of Lock No. 1, 200 ft downstream from gaging station, 1.3 miles upstream from Natmore Creek, 2.0 miles upstream from bridge on State Highway 141, 4.6 miles southeast of Kelly, and at mile 67.

DRAINAGE AREA.--5,220 sq mi.

PERIOD OF RECORD.--Chemical analyses: January to September 1973.
Water temperatures: January to September 1973.

EXTREMES.--January to September 1973:
Specific conductance: Maximum, 171 micromhos Sept. 2; minimum, 41 micromhos Feb. 6.
Water temperatures: Maximum, 29.5°C on several days during August and September; minimum, 3.0°C Jan. 15.

REMARKS.--Prior to May 18, values of temperature and conductivity were determined from samples collected once daily at site by observer. Water-quality recorder installed May 18, 1973. Quality-water data available since 1956 for station 2 miles downstream, 02105771 Cape Fear River near Acme.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DE-POSITS (UG/G)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MANGA-NESE IN BOTTOM DE-POSITS (UG/G)	DIS-SOLVED CAL-CIUM (CA) (MG/L)
JAN.										
29...	1230	6370	9.5	--	0	--	--	--	--	4.2
29... A	1230	6370	--	--	--	--	--	--	--	--
FEB.										
28...	1230	6750	7.9	--	0	--	--	--	--	3.5
28... A	1230	6750	--	--	--	--	--	--	--	--
MAR.										
27...	1100	8560	9.3	636	204	--	73	26	--	4.6
27... A	1100	8560	--	--	--	--	--	--	--	--
APR.										
17...	1400	8020	7.5	--	69	--	--	--	--	4.7
17... A	1400	8020	--	--	--	--	--	--	--	--
MAY										
08...	1200	5050	8.0	--	--	--	--	--	--	4.1
08... A	1200	5050	--	--	--	--	--	--	--	--
JUNE										
14...	1100	2430	8.5	1100	240	--	160	20	--	4.5
14... A	1100	2430	--	--	--	--	--	--	--	--
JULY										
25...	1135	4940	11	--	--	--	--	--	--	5.6
25... A	1135	4940	--	--	--	--	--	--	--	--
AUG.										
16...	1130	1800	10	--	--	--	--	--	--	5.0
16... A	1130	1800	--	--	--	--	--	--	--	--
SEP.										
19...	1038	1590	7.7	1000	690	2400	140	70	90	4.8
19... A	1038	1590	--	--	--	--	--	--	--	--

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)
JAN.										
29...	1.7	7.3	1.3	14	0	11	9.4	8.4	.0	--
29...A	--	--	--	--	--	--	--	--	--	--
FEB.										
28...	1.4	6.3	1.5	12	0	10	8.6	7.6	.3	--
28...A	--	--	--	--	--	10	--	--	--	--
MAR.										
27...	1.7	5.6	1.1	17	0	14	5.0	6.0	.1	--
27...A	--	--	--	--	--	12	--	--	--	--
APR.										
17...	.8	4.3	1.0	16	0	13	5.2	5.8	.1	.2
17...A	--	--	--	--	--	11	--	--	--	--
MAY										
08...	1.6	5.7	1.4	13	0	11	8.0	5.6	.2	.4
08...A	--	--	--	18	0	15	--	--	--	--
JUNE										
14...	1.8	8.0	1.8	16	0	13	8.0	6.2	.3	.6
14...A	--	--	--	21	0	17	--	--	--	--
JULY										
25...	2.0	5.0	2.0	24	0	20	7.8	7.3	.1	--
25...A	--	--	--	32	--	26	--	--	--	--
AUG.										
16...	1.7	11	2.0	23	0	19	11	9.2	.1	--
16...A	--	--	--	30	--	25	--	--	--	--
SEP.										
19...	1.5	11	2.1	26	0	21	9.0	9.9	.1	--
19...A	--	--	--	28	--	23	--	--	--	--

DATE	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)
JAN.									
29...	.30	--	.44	--	.14	.16	.30	.74	3.3
29...A	--	--	--	--	--	--	--	--	--
FEB.									
28...	.36	--	.51	--	.13	.27	.40	.91	4.0
28...A	--	--	--	--	--	--	--	--	--
MAR.									
27...	.60	--	.36	--	.05	.25	.30	.66	2.9
27...A	--	--	--	--	--	--	-	--	--
APR.									
17...	--	--	.36	--	--	--	.30	.66	2.9
17...A	--	--	--	--	--	--	--	--	--
MAY									
08...	--	.00	.41	--	--	--	.50	.91	4.0
08...A	--	--	--	--	--	--	--	--	--
JUNE									
14...	--	.00	.73	--	--	--	.80	1.5	6.8
14...A	--	--	--	--	--	--	--	--	--
JULY									
25...	--	--	.77	--	.10	.20	.30	1.1	4.7
25...A	--	--	--	--	--	--	--	--	--
AUG.									
16...	--	--	.72	--	.11	.29	.40	1.1	5.0
16...A	--	--	--	--	--	--	--	--	--
SEP.									
19...	--	--	5.2	1.8	--	--	1.2	6.4	28
19...A	--	--	--	--	--	--	--	--	--

D21D5769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR DCTDBER 1972 TD SEPTEMBER 1973

OATE	TOTAL PHOS-PHDRUS (P) (MG/L)	TDTAL PHOS-PHDRUS IN BOT-TDM OE-POSITS (MG/KG)	OIS-SDLVEO SOLIDS (RESI-OUE AT 1B0 C) (MG/L)	DIS-SOLVED SDLIOS (SUM DF CDNSTI-TUENTS) (MG/L)	OIS-SDLVED SOLIOS (TONS PER AC-FT)	DIS-SDLVED SDLIDS (TONS PER DAY)	TDTAL NON-FILT-RABLE RESIOUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	NDN-CAR-BDNATE HARO-NESS (MG/L)
JAN.									
29...	.11	--	S9	S0	.08	1020	46	18	6
29... A	--	--	--	--	--	--	--	--	--
FEB.									
28...	.18	--	S3	4S	.07	966	6S	15	5
28... A	--	--	--	--	--	--	--	--	--
MAR.									
27...	.08	--	63	4S	.09	1460	--	19	5
27... A	--	--	--	--	--	--	--	--	--
APR.									
17...	.08	--	S6	39	.08	1210	--	1S	2
17... A	--	--	--	--	--	--	--	--	--
MAY									
08...	.14	--	S8	41	.0B	791	--	17	6
08... A	--	--	--	--	--	--	--	--	--
JUNE									
14...	.23	--	6S	47	.09	426	--	19	6
14... A	--	--	--	--	--	--	--	--	--
JULY									
25...	.23	--	7B	S3	.11	1040	--	22	3
25... A	--	--	--	--	--	--	--	--	--
AUG.									
16...	.23	--	74	61	.10	360	--	19	1
16... A	--	--	--	--	--	--	--	--	--
SEP.									
19...	.20	93	66	60	.09	283	--	18	0
19... A	--	--	--	--	--	--	--	--	--

OATE	PERCENT SDOIUM	SDOIUM AO-SORP-TIDN RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BIO-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON OIOXIDE (CO2) (MG/L)	IMME-DIATE CDLI-FDRM (COL. PER 100 ML)	FECAL CDLI-FDRM (CDL. PER 100 ML)
JAN.												
29...	4S	.B	76	6.1	--	--	50	--	--	1B	47000	1B0
29... A	--	--	62	6.3	--	--	--	--	--	--	--	--
FEB.												
28...	46	.7	65	6.5	--	--	50	--	--	6.1	13000	260
28... A	--	--	73	S.6	8.0	17.5	--	--	1S.1	--	--	--
MAR.												
27...	38	.6	70	6.9	--	--	80	--	--	3.4	16000	320
27... A	--	--	80	S.7	11.8	16.5	--	--	10.8	--	--	--
APR.												
17...	36	.5	S2	6.2	--	--	80	--	--	16	--	--
17... A	--	--	65	6.3	14.S	22.0	--	--	9.8	--	--	--
MAY												
0B...	40	.6	64	6.2	--	--	70	--	--	13	6600	160
08... A	--	--	55	6.S	20.0	27.0	--	--	8.2	9.1	--	--
JUNE												
14...	4S	.8	80	6.S	27.0	--	60	10	--	8.1	6S000	B00
14... A	--	--	80	6.1	27.0	30.5	--	--	7.3	27	--	--
JULY												
2S...	31	.S	92	7.4	26.S	--	--	40	--	1.5	2700	130
2S... A	--	--	92	6.9	26.S	31.0	--	--	7.3	6.4	--	--
AUG.												
16...	52	1.1	100	7.0	29.0	--	--	30	--	3.7	2300	40
16... A	--	--	95	6.7	29.0	32.0	--	--	6.9	9.6	--	--
SEP.												
19...	S3	1.1	101	6.9	26.0	--	--	20	--	S.2	8000	20
19... A	--	--	95	6.3	26.0	22.0	--	--	6.9	22	--	--

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	STREP-TOCOCCI (COL-ONIES PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)
JAN.											
29...	--	--	--	--	.14	--	--	--	--	--	--
29... A	--	--	--	--	--	--	--	--	--	--	--
FEB.											
28...	--	--	--	--	.09	--	--	--	--	--	--
28... A	--	--	--	--	--	--	--	--	--	--	--
MAR.											
27...	--	8.5	--	--	.00	6	6	--	0	0	--
27... A	--	--	--	--	--	--	--	--	--	--	--
APR.											
17...	--	--	--	--	.08	--	--	--	--	--	--
17... A	--	--	--	--	--	--	--	--	--	--	--
MAY											
08...	--	--	--	--	.19	--	--	--	--	--	--
08... A	--	--	--	--	--	--	--	--	--	--	--
JUNE											
14...	80	9.0	--	--	--	3	3	--	0	0	--
14... A	--	--	--	--	--	--	--	--	--	--	--
JULY											
25...	--	--	--	--	--	--	--	--	--	--	--
25... A	--	--	--	--	--	--	--	--	--	--	--
AUG.											
16...	--	--	--	--	--	--	--	--	--	--	--
16... A	--	--	--	--	--	--	--	--	--	--	--
SEP.											
19...	--	6.5	6.5	2.4	--	3	0	1	<10	0	0
19... A	--	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)
JAN.											
29...	--	--	--	--	--	--	--	--	--	--	--
29... A	--	--	--	--	--	--	--	--	--	--	--
FEB.											
28...	--	--	--	--	--	--	--	--	--	--	--
28... A	--	--	--	--	--	--	--	--	--	--	--
MAR.											
27...	0	0	--	0	0	--	0	0	--	0	0
27... A	--	--	--	--	--	--	--	--	--	--	--
APR.											
17...	--	--	--	--	--	--	--	--	--	--	--
17... A	--	--	--	--	--	--	--	--	--	--	--
MAY											
08...	--	--	--	--	--	--	--	--	--	--	--
08... A	--	--	--	--	--	--	--	--	--	--	--
JUNE											
14...	--	20	--	1	0	--	--	30	--	26	0
14... A	--	--	--	--	--	--	--	--	--	--	--
JULY											
25...	--	--	--	--	--	--	--	--	--	--	--
25... A	--	--	--	--	--	--	--	--	--	--	--
AUG.											
16...	--	--	--	--	--	--	--	--	--	--	--
16... A	--	--	--	--	--	--	--	--	--	--	--
SEP.											
19...	0	0	3	<25	0	<2	10	3	1	<50	4
19... A	--	--	--	--	--	--	--	--	--	--	--

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)
JAN.											
29...	--	--	--	--	--	--	--	--	--	--	--
29... A	--	--	--	--	--	--	--	--	--	--	--
FEB.											
28...	--	--	--	--	--	--	--	--	--	--	--
28... A	--	--	--	--	--	--	--	--	--	--	--
MAR.											
27...	--	--	--	--	5	6	--	--	12	12	--
27... A	--	--	--	--	--	--	--	--	--	--	--
APR.											
17...	--	--	--	--	--	--	--	--	--	--	--
17... A	--	--	--	--	--	--	--	--	--	--	--
MAY											
08...	--	--	--	--	--	--	--	--	--	--	--
08... A	--	--	--	--	--	--	--	--	--	--	--
JUNE											
14...	--	--	.1	--	--	--	--	10	0	0	--
14... A	--	--	--	--	--	--	--	--	--	--	--
JULY											
25...	--	--	--	--	--	--	--	--	--	--	--
25... A	--	--	--	--	--	--	--	--	--	--	--
AUG.											
16...	--	--	--	--	--	--	--	--	--	--	--
16... A	--	--	--	--	--	--	--	--	--	--	--
SEP.											
19...	<5	.1	.0	.0	8	8	0	--	10	10	12
19... A	--	--	--	--	--	--	--	--	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), JANUARY TO MAY 1973
(ONCE-DAILY MEASUREMENT AT 0700)

DAY	JAN	FEB	MAR	APR	MAY
1	---	76	64	69	62
2	---	74	72	63	64
3	---	66	85	55	60
4	70	55	76	49	62
5	74	47	71	45	61
6	69	41	67	43	61
7	68	42	60	44	59
8	80	45	57	45	61
9	68	45	57	48	66
10	72	47	56	49	72
11	70	55	57	50	81
12	69	62	60	47	76
13	68	55	63	47	80
14	67	62	63	47	79
15	69	60	62	49	77
16	73	60	60	51	76
17	75	56	57	58	84
18	74	60	60	57	---
19	85	57	61	60	---
20	90	57	68	60	---
21	81	59	86	60	---
22	74	60	72	63	---
23	74	60	73	63	---
24	75	61	70	64	---
25	73	65	70	62	---
26	79	65	67	64	---
27	75	64	67	69	---
28	71	64	65	69	---
29	75	---	66	72	---
30	75	---	65	64	---
31	77	---	68	---	---

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), APRIL TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	124	85	71	53	57	55	162	128
2	---	---	---	---	84	80	68	55	59	45	171	163
3	---	---	---	---	88	81	59	55	60	48	170	160
4	---	---	---	---	81	73	55	45	63	60	160	126
5	---	---	---	---	74	72	52	51	66	48	145	138
6	---	---	---	---	75	72	---	---	88	58	130	118
7	---	---	---	---	77	75	---	---	86	78	117	104
8	---	---	---	---	79	76	---	---	81	78	104	78
9	---	---	---	---	80	78	60	59	85	79	101	78
10	---	---	---	---	78	74	59	45	85	35	98	78
11	---	---	---	---	75	73	56	55	91	80	98	78
12	---	---	---	---	77	73	64	57	118	92	102	98
13	---	---	---	---	78	74	67	64	121	115	105	102
14	---	---	---	---	78	77	69	65	115	112	105	102
15	---	---	---	---	77	75	71	67	114	109	105	77
16	---	---	---	---	77	72	68	65	108	48	98	93
17	---	---	---	---	81	77	66	65	98	77	102	79
18	---	---	78	77	83	75	67	64	97	77	106	102
19	---	---	79	77	112	83	81	65	94	78	104	101
20	---	---	76	74	111	78	88	81	94	78	102	98
21	---	---	76	74	104	69	86	68	91	82	97	93
22	---	---	79	75	74	63	108	78	82	75	97	93
23	---	---	82	77	63	58	107	93	80	76	97	93
24	---	---	82	78	73	47	92	84	83	80	98	92
25	---	---	83	78	44	41	94	82	83	79	102	97
26	---	---	80	78	44	40	78	65	95	77	107	101
27	---	---	82	79	49	44	71	66	109	78	115	107
28	---	---	82	81	48	46	73	65	121	111	122	115
29	---	---	82	80	51	47	81	73	122	116	129	122
30	---	---	88	81	53	50	76	59	119	113	132	128
31	---	---	102	80	---	---	58	55	140	119	---	---
MONTH	---	---	---	---	124	40	108	45	140	35	171	77
YEAR	171	35										

TEMPERATURE (°C) OF WATER, JANUARY TO MAY 1973
(ONCE-DAILY MEASUREMENT AT 0700)

DAY	JAN	FEB	MAR	APR	MAY
1	---	7.5	7.0	14.0	17.0
2	---	8.0	7.0	14.0	17.0
3	---	8.0	8.0	15.0	17.5
4	12.0	9.0	9.0	15.5	17.5
5	10.0	10.0	9.5	15.0	18.0
6	10.0	10.0	10.0	14.0	17.5
7	9.5	10.0	11.0	15.0	18.0
8	7.0	10.0	11.5	15.0	19.0
9	5.5	9.0	12.0	14.0	19.0
10	5.0	7.0	13.0	13.5	19.5
11	4.5	6.0	13.0	14.0	20.0
12	5.0	5.0	13.0	13.0	20.5
13	4.0	4.0	14.0	12.0	21.0
14	3.5	4.5	14.0	13.0	21.0
15	3.0	4.5	14.5	13.0	20.5
16	3.5	4.0	16.0	12.5	20.0
17	3.5	4.0	16.5	14.0	21.5
18	4.0	5.0	15.0	14.0	---
19	5.0	4.0	15.0	16.0	---
20	5.0	4.0	14.5	15.0	---
21	6.0	4.5	14.0	16.0	---
22	6.5	4.0	11.5	16.0	---
23	7.0	5.0	10.0	17.0	---
24	7.5	5.0	10.0	18.0	---
25	8.0	6.0	10.0	19.0	---
26	8.5	6.5	10.0	20.0	---
27	9.0	7.0	10.0	20.0	---
28	9.0	6.5	10.0	20.0	---
29	8.0	---	10.0	19.5	---
30	7.5	---	10.5	17.0	---
31	7.5	---	14.0	---	---

02105769 CAPE FEAR RIVER AT LOCK 1, NEAR KELLY, N. C.--Continued

TEMPERATURE (°C) OF WATER, APRIL TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	25.0	23.5	24.0	23.5	28.5	28.0	28.5	28.0
2	---	---	---	---	24.0	23.0	23.5	22.0	28.5	28.0	29.0	28.5
3	---	---	---	---	24.0	23.5	22.5	22.0	28.0	23.0	29.0	28.5
4	---	---	---	---	24.0	23.5	23.0	22.0	28.5	23.0	29.0	28.5
5	---	---	---	---	24.5	24.0	27.0	22.5	28.0	27.0	29.0	28.5
6	---	---	---	---	25.0	24.5	---	---	27.5	27.0	29.0	28.5
7	---	---	---	---	25.5	25.0	---	---	27.0	27.0	29.0	28.5
8	---	---	---	---	25.5	25.0	---	---	27.0	26.5	29.5	28.5
9	---	---	---	---	25.5	25.5	27.5	27.5	27.0	26.5	29.5	28.5
10	---	---	---	---	25.5	25.5	28.0	27.5	27.5	27.0	29.0	28.0
11	---	---	---	---	26.0	25.0	28.5	27.5	27.5	27.0	28.5	23.0
12	---	---	---	---	26.0	25.5	28.5	27.5	28.5	27.5	28.5	27.5
13	---	---	---	---	26.5	26.0	28.5	28.0	29.0	28.0	28.5	27.5
14	---	---	---	---	26.5	26.0	29.0	28.5	29.0	28.5	28.0	23.0
15	---	---	---	---	26.5	26.0	29.0	28.5	29.5	29.0	27.5	27.0
16	---	---	---	---	26.5	26.0	29.0	28.5	29.5	26.5	27.0	26.5
17	---	---	---	---	26.5	26.0	29.0	29.0	29.5	29.0	27.0	27.0
18	---	---	21.0	21.0	27.0	26.5	28.0	27.0	29.5	29.0	27.0	26.5
19	---	---	21.0	20.5	27.0	26.5	28.0	27.0	29.5	29.0	27.0	26.0
20	---	---	21.0	21.0	26.5	26.0	28.0	27.0	29.5	23.0	27.0	26.0
21	---	---	21.5	20.5	26.0	24.0	27.0	25.5	29.5	29.0	26.5	26.0
22	---	---	21.5	21.0	24.0	24.0	26.5	26.0	29.0	28.0	26.0	25.5
23	---	---	22.5	21.5	24.0	24.0	26.5	26.0	29.0	27.5	26.0	25.5
24	---	---	23.0	22.0	24.0	22.5	27.0	26.0	27.5	27.0	26.0	25.5
25	---	---	23.0	22.5	22.5	22.0	27.5	26.5	27.5	27.0	26.0	25.5
26	---	---	23.0	22.5	22.0	21.5	28.5	26.5	27.0	27.0	26.0	25.5
27	---	---	23.5	23.0	22.0	21.5	29.0	28.0	27.5	27.0	26.0	25.5
28	---	---	24.5	23.5	22.0	21.5	28.5	28.0	28.0	27.0	26.0	25.0
29	---	---	25.5	24.5	22.5	22.0	29.0	28.0	28.5	27.0	26.0	25.0
30	---	---	26.0	25.5	23.5	22.5	29.5	28.0	29.5	27.5	26.0	25.5
31	---	---	25.5	25.0	---	---	28.0	25.0	29.0	29.0	---	---
MONTH	---	---	---	---	27.0	21.5	29.0	22.0	29.5	23.0	29.5	23.0
YEAR	29.5	20.5										

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
JAN.				
29...	1230	6370	46	791
FEB.				
28...	1230	6750	65	1190
MAR.				
27...	1100	8560	23	532
APR.				
17...	1400	8020	27	585
MAY				
08...	1200	5050	16	218
JUNE				
14...	1100	2430	26	171
JULY				
25...	1135	4940	70	934
AUG.				
16...	1130	1800	107	520
SEP.				
19...	1038	1590	25	107

02105771 CAPE FEAR RIVER NEAR ACME, N. C.
(Radiochemical station)

LOCATION.--Lat 35°23'48", long 78°16'05", Bladen County, at bridge on State Highway 141, 0.8 mile downstream from Natmore Creek, 2.1 miles downstream from gaging station at Lock 1, 6.1 miles northwest of Acme, Columbus County, and at mile 65.

DRAINAGE AREA.--5,230 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1956 to September 1967, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1956 to September 1961.

EXTREMES.--1956-61:
Dissolved solids: Maximum, 94 mg/l Oct. 3-10, 1959; minimum, 30 mg/l Sept. 15-18, 1960.
Hardness: Maximum, 27 mg/l Oct. 3-10, 1959; minimum, 11 mg/l Mar. 1-10, 1957, Apr. 11-20, 1958.
Specific conductance: Maximum daily, 148 micromhos Oct. 6, 8, 1959; minimum daily, 40 micromhos Feb. 12, 1960.
Water temperatures: Maximum, 30.0°C on several days during summer months; minimum 0.5°C Jan. 12, 1958.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
NOV.											
30...	1300	--	--	--	--	--	--	--	--	--	--
DEC.											
13...	1100	4960	10	257	4.0	1.6	6.8	1.4	15	0	12
13...A	1100	4960	--	--	--	--	--	--	--	--	13
26...	1240	--	--	--	--	--	--	--	--	--	--
JAN.											
30...	0950	--	--	--	--	--	--	--	--	--	--
FEB.											
21...	1200	--	--	--	--	--	--	--	--	--	--
MAR.											
20...	--	--	--	--	--	--	--	--	--	--	--
27...	1700	8560	9.3	113	4.6	1.7	5.6	1.1	18	0	15
27...A	1700	8560	--	--	--	--	--	--	--	--	15
APR.											
24...	1100	--	--	--	--	--	--	--	--	--	--
MAY											
08...	1130	--	8.0	--	4.1	1.5	5.5	1.5	13	0	11
08...A	1130	--	--	--	--	--	--	--	16	0	13
28...	1230	--	--	--	--	--	--	--	--	--	--
JULY											
31...	--	--	--	--	--	--	--	--	--	--	--
AUG.											
27...	--	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
NOV.											
30...	--	--	--	--	--	--	--	--	61	--	--
DEC.											
13...	9.4	7.2	.5	--	.50	--	.070	57	--	51	.08
13...A	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	56	--	--
JAN.											
30...	--	--	--	--	--	--	--	--	57	--	--
FEB.											
21...	--	--	--	--	--	--	--	--	48	--	--
MAR.											
20...	--	--	--	--	--	--	--	--	56	--	--
27...	8.6	6.4	.1	--	.30	--	.042	58	--	48	.08
27...A	--	--	--	--	--	--	--	--	--	--	--
APR.											
24...	--	--	--	--	--	--	--	--	53	--	--
MAY											
08...	8.0	6.9	.2	.5	--	.009	.080	57	--	42	.08
08...A	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	57	--	--
JULY											
31...	--	--	--	--	--	--	--	--	64	--	--
AUG.											
27...	--	--	--	--	--	--	--	--	79	--	--

02105771 CAPE FEAR RIVER NEAR ACME, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.										
30...	--	80	--	--	--	--	--	--	--	--
DEC.										
13...	763	--	17	4	45	.7	75	6.4	--	--
13... A	--	--	--	--	--	--	85	6.1	11.5	12.6
26...	--	58	--	--	--	--	--	--	--	--
JAN.										
30...	--	44	--	--	--	--	--	--	--	--
FEB.										
21...	--	19	--	--	--	--	--	--	--	--
MAR.										
20...	--	40	--	--	--	--	--	--	--	--
27...	1340	--	19	4	38	.6	70	6.3	--	--
27... A	--	--	--	--	--	--	72	6.4	12.0	14.9
APR.										
24...	--	17	--	--	--	--	--	--	--	--
MAY										
08...	--	--	16	6	40	.6	63	6.2	20.0	--
08... A	--	--	--	--	--	--	65	6.3	20.0	25.0
28...	--	15	--	--	--	--	--	--	--	--
JULY										
31...	--	42	--	--	--	--	--	--	--	--
AUG.										
27...	--	18	--	--	--	--	--	--	--	--

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (PC/L)	SUS-PENDED GROSS ALPHA AS U-NAT. (PC/L)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L)
NOV.								
30...	--	--	--	--	--	.5	1.1	1.4
DEC.								
13...	30	--	9.6	.06	--	--	--	--
13...A	--	9.4	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	1.6
JAN.								
30...	--	--	--	--	--	--	--	.7
FEB.								
21...	--	--	--	--	--	--	--	1.1
MAR.								
20...	--	--	--	--	--	--	--	<.7
27...	70	--	14	.00	--	--	--	--
27...A	--	11.1	--	--	--	--	--	--
APR.								
24...	--	--	--	--	--	--	--	1.3
MAY								
08...	60	8.3	13	.13	10	--	--	--
08...A	--	8.3	13	--	--	--	--	--
28...	--	--	--	--	--	--	--	<.6
JULY								
31...	--	--	--	--	--	--	--	<.8
AUG.								
27...	--	--	--	--	--	--	--	1.7

DATE	SUS-PENDED GROSS ALPHA AS U-NAT. (UG/L)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L)	SUS-PENDED GROSS BETA AS CS-137 (PC/L)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENDED GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L)	DIS-SOLVED NATURAL URANIUM (U) (UG/L)
NOV.							
30...	3.3	4.2	2.7	3.4	2.4	.03	.03
DEC.							
13...	--	--	--	--	--	--	--
13... A	--	--	--	--	--	--	--
26...	3.3	4.2	1.7	3.3	1.5	.06	.04
JAN.							
30...	1.6	3.3	1.4	2.7	1.2	.04	.03
FEB.							
21...	1.1	2.7	.7	2.1	.6	.05	.03
MAR.							
20...	1.8	2.9	1.0	2.3	.9	.05	.03
27...	--	--	--	--	--	--	--
27... A	--	--	--	--	--	--	--
APR.							
24...	1.0	2.8	1.2	2.2	1.1	.04	.03
MAY							
08...	--	--	--	--	--	--	--
08... A	--	--	--	--	--	--	--
28...	.8	2.9	<.6	2.3	<.6	.04	.03
JULY							
31...	1.6	3.6	1.5	2.9	1.3	.06	.06
AUG.							
27...	.9	4.7	.8	3.7	.7	.04	.06

02107571 CAPE FEAR RIVER NEAR NAVASSA, N. C.

LOCATION.--Lat 34°17'00", long 77°59'50", New Hanover County, water-quality recorder on left bank at boat pier, at Carolina Power and Light Company Sutton Steam-Electric Generating Plant, 1.5 miles downstream from Catfish Creek, 2.0 miles northeast of Navassa, 6.0 miles upstream from Market Street in Wilmington, and at mile 34.0.

DRAINAGE AREA.--7,050 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1960 to September 1961, October 1966 to September 1972, October 1972 to June 1973 (discontinued). Prior to October 1961, published as 02107569 "at Carolina Power and Light Steam Plant at Royster."
Water temperatures: October 1960 to September 1961, October 1966 to September 1972, November 1972 to May 1973 (discontinued).

EXTREMES.--November 1972 to May 1973:
Dissolved oxygen: Maximum recorded, 12.5 mg/l Nov. 22, 23; minimum recorded, 3.8 mg/l Apr. 7.
Water temperatures: Maximum recorded, 23.5°C May 23, 24, 25, 26; minimum recorded, 3.0°C Feb. 18.

Period of record:
Specific conductance: Maximum, 29,000 micromhos Oct. 10, 1968; minimum, 48 micromhos Apr. 17, July 5, and Sept. 8, 1961.
Chloride (1960-61): Maximum, 1,700 mg/l Sept. 23, 1960; minimum, 4.6 mg/l May 1, 1961.
Dissolved oxygen (1969-72): Maximum recorded, 13.0 mg/l Dec. 30, 1969; minimum recorded, 2.2 mg/l Sept. 26, 1970, July 26, 1972.
Water temperatures: Maximum, 35.0°C Aug. 20, 1968; minimum, 1.0°C Feb. 15, 16, 1969.

REMARKS.--Prior to October 1961, values of specific conductance and chloride were determined from individual samples. The recorder intake location is 1 foot below mean low-water surface and 6 feet off left bank. Recorder not sensitive to very low specific conductances. The maximum and minimum for the year is <200 micromhos.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	TIDE STAGE CODE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
25...	1445	2010	--	--	--	--	--	--	--	--
NOV.										
30...	1000	--	7.9	49	4.1	1.7	8.2	1.8	15	0
30... A	1000	5210	--	--	--	--	--	--	--	--
JAN.										
25...	0915	3410	--	--	--	--	--	--	--	--
MAR.										
23...	0945	--	4.5	32	5.0	2.0	8.0	1.5	19	0
23... A	0945	3110	--	--	--	--	--	--	--	--
APR.										
17...	1720	3210	--	--	--	--	--	--	--	--
MAY										
17...	0930	--	5.0	--	5.3	1.6	12	1.6	17	0
17... A	0930	4410	--	--	--	--	--	--	20	0
JUNE										
20...	1400	1110	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
25...	--	--	--	--	--	--	--	--	--	--
NOV.										
30...	12	10	10	.1	--	.24	--	.070	74	52
30... A	13	--	--	--	--	--	--	--	--	--
JAN.										
25...	--	--	--	--	--	--	--	--	--	--
MAR.										
23...	16	8.8	10	.3	--	.27	--	.086	70	51
23... A	13	--	--	--	--	--	--	--	--	--
APR.										
17...	--	--	--	--	--	--	--	--	--	--
MAY										
17...	14	9.0	14	.2	.7	--	.005	.080	79	60
17... A	16	--	--	--	--	--	--	--	--	--
JUNE										
20...	--	--	--	--	--	--	--	--	--	--

02107571 CAPE FEAR RIVER NEAR NAVASSA, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
25...	--	--	--	--	--	6500	6.4	16.0	16.0
NOV.									
30...	.10	17	6	48	.9	82	6.1	--	--
30... A	--	--	--	--	--	90	5.8	8.0	11.0
JAN.									
25...	--	--	--	--	--	70	6.3	8.4	5.0
MAR.									
23...	.10	21	5	43	.8	88	6.1	--	--
23... A	--	--	--	--	--	90	5.7	13.5	8.0
APR.									
17...	--	--	--	--	--	50	5.9	15.0	22.5
MAY									
17...	.11	20	6	54	1.2	106	6.4	--	--
17... A	--	--	--	--	--	110	5.3	20.5	16.0
JUNE									
20...	--	--	--	--	--	125	6.8	27.0	29.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.						
25...	--	6.4	--	500	--	--
NOV.						
30...	70	--	19	--	.10	--
30... A	--	9.9	--	400	--	--
JAN.						
25...	--	11.4	--	350	--	--
MAR.						
23...	100	--	24	--	.05	--
23... A	--	8.5	--	120	--	--
APR.						
17...	--	8.3	--	150	--	--
MAY						
17...	120	--	11	--	.20	100
17... A	--	7.2	16	100	--	--
JUNE						
20...	--	6.5	--	30	--	--

02107571 CAPE FEAR RIVER NEAR NAVASSA, N. C.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, NOVEMBER 1972 TO MAY 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	8.8	8.2	7.4	6.8	8.0	7.0	7.4	6.8
2	---	---	---	---	8.3	8.0	7.7	6.5	7.6	6.3	7.4	6.6
3	---	---	---	---	8.2	7.6	7.4	6.7	6.7	6.0	7.4	6.4
4	---	---	---	---	8.3	7.6	9.3	7.7	6.7	6.0	7.4	6.3
5	---	---	---	---	8.5	7.8	7.7	6.8	6.1	6.5	7.5	6.4
6	---	---	---	---	8.3	7.8	7.4	6.6	6.0	5.4	7.4	6.5
7	---	---	---	---	8.3	7.7	---	---	5.8	5.2	7.1	6.0
8	---	---	---	---	8.4	7.5	---	---	5.5	5.5	6.3	5.6
9	---	---	---	---	8.0	7.3	---	---	6.0	5.3	6.4	5.2
10	---	---	---	---	7.9	7.3	---	---	6.6	5.8	6.2	5.0
11	---	---	---	---	7.9	7.0	---	---	7.1	6.4	5.9	5.0
12	---	---	---	---	7.5	7.0	---	---	7.2	6.8	5.9	4.9
13	---	---	---	---	7.4	7.0	---	---	7.1	6.9	5.3	4.8
14	---	---	---	---	7.4	6.3	---	---	7.0	6.7	5.5	4.8
15	---	---	9.3	8.8	7.3	6.8	10.5	9.0	6.8	6.3	5.6	5.0
16	---	---	9.1	8.8	7.5	6.7	---	---	7.6	6.5	---	---
17	---	---	9.5	8.8	8.1	7.2	---	---	8.4	7.5	---	---
18	---	---	10.5	9.7	7.9	7.1	---	---	8.5	7.9	---	---
19	---	---	11.1	10.5	7.6	7.1	---	---	8.2	7.6	6.2	5.7
20	---	---	11.5	10.7	7.6	6.9	---	---	8.0	7.3	---	---
21	---	---	12.1	10.5	7.3	6.7	---	---	9.1	7.4	---	---
22	---	---	12.5	11.2	7.7	6.7	---	---	8.9	8.0	---	---
23	---	---	12.5	11.3	7.7	6.8	---	---	8.3	7.8	---	---
24	---	---	12.2	11.4	7.3	6.6	---	---	8.2	7.7	---	---
25	---	---	12.2	11.7	7.2	6.5	---	---	8.2	7.2	---	---
26	---	---	12.1	10.3	7.1	6.4	7.7	6.8	7.6	7.0	---	---
27	---	---	---	---	6.8	6.5	7.5	6.5	7.3	6.8	6.6	6.2
28	---	---	---	---	7.2	6.6	6.7	5.6	7.3	6.3	6.8	5.8
29	---	---	---	---	7.1	6.6	6.3	5.5	---	---	6.4	6.0
30	---	---	8.9	8.4	7.0	6.3	7.4	5.9	---	---	6.6	6.2
31	---	---	---	---	7.1	6.6	7.8	6.7	---	---	6.6	5.9
MONTH	---	---	---	---	8.9	6.3	---	---	9.1	5.2	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.3	5.8	---	---	---	---	---	---	---	---	---	---
2	6.2	5.5	---	---	---	---	---	---	---	---	---	---
3	5.7	4.9	---	---	---	---	---	---	---	---	---	---
4	5.3	4.0	---	---	---	---	---	---	---	---	---	---
5	4.5	3.9	---	---	---	---	---	---	---	---	---	---
6	4.5	3.9	---	---	---	---	---	---	---	---	---	---
7	4.8	3.8	---	---	---	---	---	---	---	---	---	---
8	4.9	4.4	6.3	5.9	---	---	---	---	---	---	---	---
9	4.9	4.0	6.2	5.8	---	---	---	---	---	---	---	---
10	4.5	4.0	5.9	5.4	---	---	---	---	---	---	---	---
11	4.8	4.4	5.9	5.4	---	---	---	---	---	---	---	---
12	4.9	4.6	6.2	5.6	---	---	---	---	---	---	---	---
13	---	---	6.4	5.5	---	---	---	---	---	---	---	---
14	---	---	5.9	5.1	---	---	---	---	---	---	---	---
15	---	---	5.5	5.1	---	---	---	---	---	---	---	---
16	6.5	5.7	5.5	5.2	---	---	---	---	---	---	---	---
17	6.0	5.4	5.7	5.0	---	---	---	---	---	---	---	---
18	5.9	5.5	5.6	5.3	---	---	---	---	---	---	---	---
19	5.7	5.4	5.6	5.2	---	---	---	---	---	---	---	---
20	5.8	5.3	5.7	5.3	---	---	---	---	---	---	---	---
21	---	---	6.0	5.2	---	---	---	---	---	---	---	---
22	---	---	6.2	5.4	---	---	---	---	---	---	---	---
23	---	---	6.0	5.5	---	---	---	---	---	---	---	---
24	---	---	5.6	5.3	---	---	---	---	---	---	---	---
25	---	---	5.4	4.9	---	---	---	---	---	---	---	---
26	---	---	5.1	4.8	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	12.5	3.8										

02107571 CAPE FEAR RIVER NEAR NAVASSA, N. C.--Continued

TEMPERATURE (°C) OF WATER, NOVEMBER 1972 TO MAY 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	8.5	7.0	12.0	11.0	9.0	7.0	12.0	8.5
2	---	---	---	---	8.5	6.5	11.5	10.5	10.5	8.5	14.0	9.5
3	---	---	---	---	8.5	7.0	10.5	10.0	10.5	9.0	14.5	11.0
4	---	---	---	---	9.0	6.0	11.0	10.0	10.5	8.0	14.5	10.5
5	---	---	---	---	9.0	8.0	12.0	10.5	11.0	9.0	14.5	11.0
6	---	---	---	---	10.0	9.0	12.0	10.5	11.0	10.0	15.0	12.0
7	---	---	---	---	10.5	9.5	---	---	12.5	10.0	15.5	13.0
8	---	---	---	---	10.5	9.5	---	---	12.0	10.5	15.5	13.5
9	---	---	---	---	11.0	10.0	---	---	12.0	8.5	16.5	14.0
10	---	---	---	---	11.5	10.5	---	---	8.5	4.5	16.0	15.0
11	---	---	---	---	12.0	11.0	---	---	5.0	4.0	17.0	15.0
12	---	---	---	---	12.0	11.0	---	---	5.0	4.0	19.5	15.5
13	---	---	---	---	12.0	11.0	---	---	6.0	4.0	19.5	14.5
14	---	---	---	---	12.0	11.0	---	---	6.5	5.0	20.5	15.0
15	---	---	15.5	14.5	13.0	11.0	4.5	3.5	8.5	5.5	19.5	16.5
16	---	---	14.5	14.0	13.0	10.5	---	---	6.5	4.5	---	---
17	---	---	14.0	13.0	10.5	9.5	---	---	5.0	3.5	---	---
18	---	---	13.0	12.0	9.0	7.0	---	---	5.0	3.0	---	---
19	---	---	12.0	11.5	9.0	6.0	---	---	6.5	4.0	18.0	14.5
20	---	---	13.0	11.5	9.0	7.0	---	---	8.0	4.5	---	---
21	---	---	11.0	10.0	9.5	8.0	---	---	8.0	5.5	---	---
22	---	---	10.0	9.0	10.0	9.5	---	---	8.0	5.5	---	---
23	---	---	9.0	8.5	9.5	9.0	---	---	9.0	6.0	---	---
24	---	---	9.0	8.0	9.0	8.5	---	---	10.0	6.5	---	---
25	---	---	8.5	7.0	9.0	8.5	9.0	7.0	13.5	6.5	---	---
26	---	---	9.5	8.5	9.5	8.5	9.0	8.0	13.5	10.5	---	---
27	---	---	---	---	9.5	8.5	10.0	8.5	14.0	9.5	14.5	13.5
28	---	---	---	---	9.5	8.5	10.5	8.5	15.5	9.5	14.5	13.0
29	---	---	---	---	9.5	8.5	10.5	8.0	---	---	14.5	13.0
30	---	---	8.0	7.0	10.0	9.5	9.5	7.0	---	---	15.0	13.5
31	---	---	---	---	11.0	10.0	9.0	7.0	---	---	15.5	14.5
MONTH	---	---	---	---	13.0	6.0	---	---	15.5	3.0	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	15.0	---	---	---	---	---	---	---	---	---	---
2	17.0	15.0	---	---	---	---	---	---	---	---	---	---
3	17.0	15.5	---	---	---	---	---	---	---	---	---	---
4	18.0	16.0	---	---	---	---	---	---	---	---	---	---
5	17.0	16.0	---	---	---	---	---	---	---	---	---	---
6	16.5	15.5	---	---	---	---	---	---	---	---	---	---
7	20.0	15.5	---	---	---	---	---	---	---	---	---	---
8	17.0	15.5	20.5	19.5	---	---	---	---	---	---	---	---
9	20.0	15.5	21.0	19.5	---	---	---	---	---	---	---	---
10	20.0	15.5	21.5	20.0	---	---	---	---	---	---	---	---
11	16.0	15.0	23.0	20.5	---	---	---	---	---	---	---	---
12	15.5	14.0	23.0	21.0	---	---	---	---	---	---	---	---
13	---	---	23.0	21.5	---	---	---	---	---	---	---	---
14	---	---	22.0	21.5	---	---	---	---	---	---	---	---
15	---	---	22.0	21.5	---	---	---	---	---	---	---	---
16	16.5	14.0	21.5	21.0	---	---	---	---	---	---	---	---
17	18.5	14.5	21.5	21.0	---	---	---	---	---	---	---	---
18	16.5	15.0	21.5	20.5	---	---	---	---	---	---	---	---
19	18.5	16.0	22.0	20.5	---	---	---	---	---	---	---	---
20	16.5	15.0	22.0	21.0	---	---	---	---	---	---	---	---
21	---	---	23.0	21.0	---	---	---	---	---	---	---	---
22	---	---	23.0	21.0	---	---	---	---	---	---	---	---
23	---	---	23.5	21.5	---	---	---	---	---	---	---	---
24	---	---	23.5	22.0	---	---	---	---	---	---	---	---
25	---	---	23.5	23.0	---	---	---	---	---	---	---	---
26	---	---	23.5	23.0	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	23.5	3.0										

02107572 CAPE FEAR RIVER AT ROYSTER, N. C.

LOCATION.--Lat 34°16'15", long 78°00'00", Brunswick County, water-quality recorder on right bank at Royster Fertilizer Plant pumping station at Royster, and 2.5 miles downstream from Indian Creek.

DRAINAGE AREA.--7,060 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: November 1961 to June 1973 (discontinued).
Water temperatures: November 1961 to June 1973 (discontinued).

EXTREMES.--October 1972 to June 1973:
Specific conductance: Maximum, 14,800 micromhos Oct. 24; minimum, < 200 micromhos on many days during year.
Water temperatures: Maximum, 28.5°C June 2; minimum, 1.5°C Jan. 14.

Period of record:
Specific conductance: Maximum, 20,000 micromhos on many days in 1966, 1968 and 1969; minimum, 43 micromhos Oct. 16, 1964.
Water temperatures: Maximum, 35.0°C Aug. 23, 1968; minimum, 1.5°C Jan. 14, 1973.

REMARKS.--Recorder intake about 1 foot below water surface. Recorder not sensitive to specific conductances below about 200 micromhos.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), OCTOBER 1972 TO JUNE 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	840	200	---	---	---	---	---	---	---	---
2	---	---	1160	200	---	---	---	---	---	---	---	---
3	---	---	1120	200	---	---	---	---	---	---	---	---
4	---	---	1660	200	---	---	200	200	---	---	---	---
5	---	---	760	200	---	---	200	200	---	---	---	---
6	---	---	4000	200	---	---	200	200	---	---	---	---
7	---	---	7800	200	---	---	200	200	---	---	---	---
8	---	---	6400	200	200	200	200	200	200	200	200	200
9	---	---	2600	200	---	---	200	200	---	---	200	200
10	---	---	840	200	---	---	200	200	---	---	200	200
11	---	---	200	200	---	---	200	200	---	---	200	200
12	---	---	200	200	---	---	200	200	---	---	200	200
13	---	---	200	200	200	200	200	200	---	---	200	200
14	---	---	200	200	200	200	200	200	---	---	200	200
15	---	---	200	200	200	200	200	200	---	---	200	200
16	---	---	200	200	200	200	200	200	---	---	200	200
17	---	---	200	200	200	200	200	200	---	---	200	200
18	---	---	200	200	200	200	200	200	---	---	200	200
19	---	---	200	200	200	200	200	200	---	---	200	200
20	---	---	200	200	---	---	200	200	---	---	200	200
21	---	---	200	200	---	---	---	---	---	---	200	200
22	---	---	200	200	---	---	---	---	---	---	200	200
23	---	---	200	200	---	---	---	---	---	---	200	200
24	14800	420	200	200	---	---	---	---	---	---	200	200
25	10200	250	200	200	---	---	---	---	---	---	200	200
26	11000	220	200	200	---	---	---	---	---	---	200	200
27	9000	210	200	200	---	---	---	---	---	---	200	200
28	6800	210	200	200	---	---	---	---	---	---	200	200
29	3900	200	200	200	---	---	---	---	---	---	200	200
30	3900	200	---	---	---	---	---	---	---	---	200	200
31	1600	200	---	---	---	---	---	---	---	---	200	200
MONTH	---	---	7800	200	---	---	---	---	---	---	---	---

02107572 CAPE FEAR RIVER AT ROYSTER, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), OCTOBER 1972 TO JUNE 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	200	200	200	200	200	200	---	---	---	---	---	---
2	200	200	200	200	200	200	---	---	---	---	---	---
3	200	200	200	200	200	200	---	---	---	---	---	---
4	200	200	200	200	---	---	---	---	---	---	---	---
5	200	200	200	200	---	---	---	---	---	---	---	---
6	200	200	200	200	---	---	---	---	---	---	---	---
7	200	200	200	200	---	---	---	---	---	---	---	---
8	200	200	200	200	---	---	---	---	---	---	---	---
9	200	200	200	200	---	---	---	---	---	---	---	---
10	200	200	200	200	---	---	---	---	---	---	---	---
11	200	200	200	200	---	---	---	---	---	---	---	---
12	200	200	200	200	---	---	---	---	---	---	---	---
13	200	200	200	200	---	---	---	---	---	---	---	---
14	200	200	200	200	---	---	---	---	---	---	---	---
15	200	200	200	200	---	---	---	---	---	---	---	---
16	200	200	200	200	---	---	---	---	---	---	---	---
17	200	200	200	200	---	---	---	---	---	---	---	---
18	200	200	200	200	---	---	---	---	---	---	---	---
19	200	200	200	200	---	---	---	---	---	---	---	---
20	200	200	200	200	---	---	---	---	---	---	---	---
21	200	200	200	200	---	---	---	---	---	---	---	---
22	200	200	200	200	---	---	---	---	---	---	---	---
23	200	200	200	200	---	---	---	---	---	---	---	---
24	200	200	200	200	---	---	---	---	---	---	---	---
25	200	200	200	200	---	---	---	---	---	---	---	---
26	200	200	200	200	---	---	---	---	---	---	---	---
27	200	200	200	200	---	---	---	---	---	---	---	---
28	200	200	260	200	---	---	---	---	---	---	---	---
29	200	200	200	200	---	---	---	---	---	---	---	---
30	200	200	200	200	---	---	---	---	---	---	---	---
31	---	---	200	200	---	---	---	---	---	---	---	---
MONTH	200	200	260	200	---	---	---	---	---	---	---	---
YEAR	14800	200										

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO JUNE 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	18.0	16.5	---	---	---	---	---	---	---	---
2	---	---	18.0	16.5	---	---	---	---	---	---	---	---
3	---	---	19.0	17.0	---	---	---	---	---	---	---	---
4	---	---	19.5	17.0	---	---	12.0	10.5	---	---	---	---
5	---	---	18.0	16.5	---	---	11.5	10.5	---	---	---	---
6	---	---	18.0	16.0	---	---	11.0	10.0	---	---	---	---
7	---	---	18.5	16.0	---	---	10.5	9.5	---	---	---	---
8	---	---	18.5	16.5	12.0	7.0	9.0	6.5	11.0	10.5	15.0	13.5
9	---	---	17.0	16.0	---	---	6.5	5.0	---	---	15.0	14.0
10	---	---	17.0	16.0	---	---	6.0	4.5	---	---	14.5	14.0
11	---	---	18.0	15.5	---	---	5.0	4.0	---	---	16.0	14.5
12	---	---	16.0	15.5	---	---	4.5	3.5	---	---	16.5	15.0
13	---	---	16.0	15.5	13.5	12.0	3.5	3.0	---	---	16.0	15.5
14	---	---	17.0	15.5	13.0	12.0	3.5	1.5	---	---	17.0	15.0
15	---	---	15.5	15.0	13.5	11.5	3.5	2.0	---	---	18.0	16.0
16	---	---	15.0	14.0	12.0	11.0	3.5	2.0	---	---	19.5	18.0
17	---	---	14.5	13.5	11.0	9.0	5.5	3.0	---	---	19.0	17.0
18	---	---	13.5	12.0	9.0	7.0	5.5	3.5	---	---	17.0	15.0
19	---	---	13.5	12.0	8.0	5.5	5.5	4.0	---	---	16.0	14.5
20	---	---	14.0	11.5	---	---	5.5	5.0	---	---	16.0	15.0
21	---	---	12.0	10.0	---	---	---	---	---	---	15.0	14.5
22	---	---	10.5	8.5	---	---	---	---	---	---	14.5	12.0
23	---	---	9.5	8.0	---	---	---	---	---	---	14.0	11.0
24	20.0	19.0	10.0	8.0	---	---	---	---	---	---	16.0	11.0
25	19.0	18.0	8.5	7.0	---	---	---	---	---	---	12.0	11.0
26	19.0	17.0	10.5	7.0	---	---	---	---	---	---	13.5	12.0
27	18.0	17.0	9.0	8.0	---	---	---	---	---	---	13.0	11.5
28	19.0	19.0	9.0	7.0	---	---	---	---	---	---	13.5	11.0
29	18.5	18.0	8.5	8.0	---	---	---	---	---	---	13.0	11.5
30	18.5	17.0	---	---	---	---	---	---	---	---	13.5	13.0
31	18.0	16.5	---	---	---	---	---	---	---	---	14.5	13.5
MONTH	---	---	19.5	7.0	---	---	---	---	---	---	---	---

02107572 CAPE FEAR RIVER AT ROYSTER, N. C.--Continued

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO JUNE 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	14.0	19.5	18.0	26.5	24.0	---	---	---	---	---	---
2	15.5	14.5	19.5	18.0	28.5	23.5	---	---	---	---	---	---
3	16.0	15.0	19.5	18.0	26.5	23.5	---	---	---	---	---	---
4	17.0	15.5	19.0	18.5	---	---	---	---	---	---	---	---
5	16.0	15.0	20.0	17.0	---	---	---	---	---	---	---	---
6	16.0	15.0	22.0	18.0	---	---	---	---	---	---	---	---
7	16.0	15.0	21.0	18.0	---	---	---	---	---	---	---	---
8	16.0	15.0	19.5	18.5	---	---	---	---	---	---	---	---
9	16.0	14.5	23.0	19.5	---	---	---	---	---	---	---	---
10	16.0	14.5	22.0	20.0	---	---	---	---	---	---	---	---
11	14.5	13.5	23.0	20.5	---	---	---	---	---	---	---	---
12	14.5	12.0	23.0	21.0	---	---	---	---	---	---	---	---
13	14.0	13.0	23.0	21.0	---	---	---	---	---	---	---	---
14	14.0	12.0	22.0	21.5	---	---	---	---	---	---	---	---
15	11.5	11.5	23.0	21.5	---	---	---	---	---	---	---	---
16	14.5	12.0	22.0	21.0	---	---	---	---	---	---	---	---
17	15.0	14.0	23.0	21.0	---	---	---	---	---	---	---	---
18	15.5	14.5	21.5	20.5	---	---	---	---	---	---	---	---
19	16.0	15.0	22.0	20.5	---	---	---	---	---	---	---	---
20	18.5	15.0	21.5	20.5	---	---	---	---	---	---	---	---
21	20.5	16.0	23.0	21.0	---	---	---	---	---	---	---	---
22	20.0	16.5	23.5	20.5	---	---	---	---	---	---	---	---
23	20.5	18.0	23.5	21.5	---	---	---	---	---	---	---	---
24	21.0	18.5	23.0	21.0	---	---	---	---	---	---	---	---
25	20.5	19.5	26.5	24.0	---	---	---	---	---	---	---	---
26	21.0	19.5	24.0	23.0	---	---	---	---	---	---	---	---
27	21.0	20.0	25.0	23.5	---	---	---	---	---	---	---	---
28	20.5	19.5	24.5	24.0	---	---	---	---	---	---	---	---
29	20.5	19.5	25.0	24.0	---	---	---	---	---	---	---	---
30	21.0	19.5	25.5	24.5	---	---	---	---	---	---	---	---
31	---	---	26.5	24.5	---	---	---	---	---	---	---	---
MONTH	21.0	11.5	26.5	17.0	---	---	---	---	---	---	---	---
YEAR	28.5	1.5										

CAPE FEAR RIVER BASIN

02108619 NORTHEAST CAPE FEAR RIVER AT CASTLE HAYNE, N. C.

LOCATION.--Lat 34°22'20", long 77°54'00", New Hanover County, at bridge on U.S. Highway 117, 0.8 mile north of Castle Hayne, and 4.7 miles above Prince George Creek.

DRAINAGE AREA.--1,499 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1954 to September 1967, water years 1970-73 (discontinued, partial-record station).
Water temperatures: October 1954 to September 1967.

EXTREMES.--1954-67:
Specific conductance: Maximum daily, 5,060 micromhos Oct. 23, 24, 1954; minimum daily, 34 micromhos Sept. 25, 1955, Mar. 10, 1959.
Chloride: Maximum, 1,450 mg/l Oct. 15, 1954; minimum, 4.5 mg/l Sept. 21-30, 1955.
Water temperatures: Maximum, 32.0°C Aug. 10, 1956; minimum 0.5°C Feb. 3, 1966.

REMARKS.--Salinity station from 1954-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.									
18...	1030	7.8	0	5.2	2.0	14	2.4	13	0
18... A	1030	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.									
18...	11	11	23	.4	.20	.000	90	74	.12
18... A	--	--	--	--	--	--	--	--	--

02108619 NORTHEAST CAPE FEAR RIVER AT CASTLE HAYNE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
OCT.								
18...	21	11	56	1.3	128	6.1	--	--
18... A	--	--	--	--	--	6.2	23.0	20.0

DATE	COLOR (PLATINUM-COBALT UNITS)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT.			
18...	240	17	.15

CAPE FEAR RIVER BASIN

02108637 NORTHEAST CAPE FEAR RIVER NEAR CASTLE HAYNE, N. C.

LOCATION.--Lat 34°20'20", long 77°59'40", Pender County, at end of Secondary Road 1428, 4.2 miles downstream from Long Creek, and 5.8 miles west of Castle Hayne.

DRAINAGE AREA.--1,690 sq mi, approximately.

PERIOD OF RECORD.--Water years 1970, 1972-73 (discontinued, partial-record station).

REMARKS.--No data collected for the 1971 water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
1.									
18...	1045	8.5	0	5.2	2.0	14	2.3	12	0
18... A	1045	--	--	--	--	--	--	--	--

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
OCT.									
18...	10	11	23	.2	.09	.000	94	73	.13
18... A	--	--	--	--	--	--	--	--	--

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
OCT.								
18...	21	11	56	1.3	128	6.1	--	--
18... A	--	--	--	--	--	5.9	23.0	20.0

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT.				
18...	195	--	15	.18
18... A	--	6.1	--	--

02108692 NORTHEAST CAPE FEAR RIVER AT WILMINGTON, N. C.

LOCATION.--Lat 34°15'10", long 77°57'00", New Hanover County, at bridge on U.S. Highway 17 at Wilmington, and 1 mile downstream from Smith Creek.

DRAINAGE AREA.--1,740 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to June 1973 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	TIDE STAGE CODE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
25... A	1400	2010	--	--	--	--	--	--	--	--
NOV.										
30...	0815	--	6.1	115	5.3	2.0	12	2.2	13	0
30... A	0815	2010	--	--	--	--	--	--	--	--
JAN.										
25... A	0820	3210	--	--	--	--	--	--	--	--
MAR.										
23...	0830	--	5.0	6	5.1	1.8	12	1.8	14	0
23... A	0830	3210	--	--	--	--	--	--	--	--
APR.										
17... A	1630	3610	--	--	--	--	--	--	--	--
MAY										
17...	0800	--	6.0	--	6.6	3.2	24	2.2	18	0
17... A	0400	4110	--	--	--	--	--	--	23	0
JUNE										
20... A	1330	1210	--	--	--	--	--	--	30	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
25... A	65	--	--	--	--	--	--	--	--	--
NOV.										
30...	11	12	20	.2	--	.24	--	.030	97	66
30... A	14	--	--	--	--	--	--	--	--	--
JAN.										
25... A	10	--	--	--	--	--	--	--	--	--
MAR.										
23...	11	10	15	.4	--	.50	--	.062	72	61
23... A	11	--	--	--	--	--	--	--	--	--
APR.										
17... A	7	--	--	--	--	--	--	--	--	--
MAY										
17...	15	18	35	.3	.7	--	.011	.10	168	110
17... A	19	--	--	--	--	--	--	--	--	--
JUNE										
20... A	25	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
25... A	--	--	--	--	--	11000	6.5	18.0	16.0
NOV.									
30...	.13	21	11	52	1.1	110	6.1	--	--
30... A	--	--	--	--	--	120	6.9	9.0	14.0
JAN.									
25... A	--	--	--	--	--	90	6.4	8.0	2.8
MAR.									
23...	.10	20	9	54	1.2	98	6.2	--	--
23... A	--	--	--	--	--	100	5.6	13.5	5.5
APR.									
17... A	--	--	--	--	--	70	5.8	16.0	22.5
MAY									
17...	.23	30	15	62	1.9	166	6.7	--	--
17... A	--	--	--	--	--	160	6.4	21.5	16.5
JUNE									
20... A	--	--	--	--	--	560	6.7	27.5	33.0

02108692 NORTHEAST CAPE FEAR RIVER AT WILMINGTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)
OCT.						
25... A	--	7.1	--	1180	--	--
NOV.						
30...	80	--	17	--	.18	--
30... A	--	9.0	--	150	--	--
JAN.						
25... A	--	9.8	--	270	--	--
MAR.						
23...	180	--	14	--	.07	--
23... A	--	8.6	--	170	--	--
APR.						
17... A	--	7.9	--	90	--	--
MAY						
17...	120	--	5.7	--	.16	100
17... A	--	6.8	15	980	--	--
JUNE						
20... A	--	5.6	9.6	330	--	--

PEE DEE RIVER BASIN

02112000 YADKIN RIVER AT WILKESBORO, N. C.

LOCATION.--Lat 36°09'09", long 81°08'45", Wilkes County, temperature recorder at gaging station on right bank 150 ft upstream from bridge on U.S. Highway 421A between North Wilkesboro and Wilkesboro, 150 ft downstream from Reddies River, 0.5 mile northeast of Wilkesboro, and 382 miles upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--493 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1948, October 1961 to September 1962, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1947 to September 1948, October 1957 to April 1973 (discontinued).

EXTREMES.--October 1972 to April 1973:
Water temperatures: Maximum, 20.0°C Oct. 1, 2; minimum, 4.0°C Feb. 18.

Period of record:
Dissolved solids (1947-48): Maximum, 37 mg/l May 1-10, July 1-10, Aug. 21-31, 1948; minimum, 27 mg/l Mar. 21-31, 1948.
Hardness (1947-48): Maximum, 14 mg/l Aug. 21-31, 1948; minimum, 6 mg/l July 11-20, 1948.
Water temperatures: Maximum, 28.5°C June 24, 25, 1948; minimum, freezing point on several days in 1958, 1960, and 1962.

REMARKS.--Miscellaneous chemical data published for water years 1946-47, 1955-58, 1960-61, 1963-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
DEC.									
07...	1020	606	11	0	2.6	.9	2.8	1.0	14
07... A	1020	606	--	--	--	--	--	--	--
FEB.									
21...	1030	753	11	0	2.2	.7	1.6	1.0	12
21... A	1030	753	--	--	--	--	--	--	--

DATE	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.									
07...	0	11	1.5	2.9	.0	.10	.000	35	31
07... A	--	17	--	--	--	--	--	--	--
FEB.									
21...	0	10	2.2	1.4	.0	.00	.000	29	26
21... A	--	--	--	--	--	--	--	--	--

02112000 YADKIN RIVER AT WILKESBORO, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
DEC.									
07...	.05	58.9	10	0	35	.4	36	5.9	--
7... A	--	--	--	--	--	--	--	6.9	8.0
FEB.									
21...	.04	59.0	9	0	27	.2	31	6.5	--
21... A	--	--	--	--	--	--	--	6.5	5.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.					
07...	5	--	28	230	.04
07... A	--	11.6	--	--	--
FEB.					
21...	20	--	6.1	<10	.05
21... A	--	12.1	--	--	--

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO APRIL 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	18.5	15.5	14.0	8.0	6.5	8.0	7.0	5.0	5.0	6.5	5.0
2	20.0	18.5	15.5	14.5	8.0	6.5	7.0	6.5	8.5	5.0	6.0	5.0
3	19.0	18.0	16.0	15.0	8.0	6.0	6.5	6.0	8.5	5.5	6.0	5.5
4	18.5	18.0	15.5	14.5	7.0	6.0	8.0	6.5	5.5	5.0	6.0	5.5
5	18.5	18.0	15.0	13.0	7.0	6.5	7.0	7.0	5.5	5.0	6.0	5.5
6	18.5	17.0	15.0	13.0	8.5	7.0	7.0	6.5	6.0	5.5	5.5	5.0
7	18.5	17.0	13.0	13.0	7.0	6.5	6.5	5.5	6.0	5.5	6.0	5.5
8	18.5	16.5	14.0	13.0	6.5	6.5	6.5	5.0	6.0	5.5	7.0	6.0
9	18.5	17.0	14.0	12.0	7.0	6.5	6.0	5.5	5.5	5.0	6.5	6.0
10	18.0	16.5	13.0	11.5	8.0	7.0	6.0	5.0	5.5	5.0	7.0	6.0
11	18.0	16.0	13.0	12.0	8.0	7.0	6.0	5.0	6.0	5.0	6.5	6.5
12	18.0	16.0	13.0	11.0	7.0	7.0	6.0	5.0	6.0	4.5	9.5	6.5
13	18.0	16.5	12.0	11.5	8.5	7.0	5.5	4.5	6.0	5.0	9.0	7.0
14	17.0	16.0	13.0	11.0	8.0	7.0	5.5	4.5	5.5	5.0	9.0	8.0
15	18.0	16.5	12.0	11.0	8.0	7.0	6.0	5.0	6.0	5.5	8.5	8.0
16	16.5	16.0	11.5	10.5	8.0	7.0	6.0	5.0	6.0	5.0	10.0	8.0
17	18.0	16.5	12.0	10.5	7.0	7.0	6.0	5.0	6.0	4.5	11.5	10.0
18	17.0	16.5	11.5	10.5	7.0	6.5	6.5	5.0	6.0	4.0	11.5	11.0
19	16.5	15.0	10.5	9.5	7.0	6.5	7.0	6.0	7.0	5.5	11.0	10.5
20	16.0	14.5	10.0	9.0	8.0	7.0	6.5	5.5	6.0	5.0	11.0	10.0
21	15.5	14.5	9.5	9.0	7.0	7.0	6.0	5.5	6.0	5.0	10.0	9.5
22	15.5	14.0	9.5	9.0	7.0	7.0	6.5	5.0	6.0	5.0	10.5	9.5
23	14.5	14.0	9.0	8.5	7.0	7.0	6.0	6.0	6.0	5.0	10.5	9.0
24	15.5	14.5	9.5	8.5	7.0	7.0	6.0	5.5	6.5	5.0	10.5	9.0
25	14.5	14.0	8.5	8.5	8.0	6.5	6.0	5.5	6.5	5.0	9.5	9.5
26	14.5	14.0	9.0	8.5	8.5	8.0	6.0	5.0	6.0	5.5	10.0	9.5
27	14.5	14.0	9.0	8.5	8.5	8.0	6.5	6.0	6.0	5.5	10.0	9.5
28	15.0	14.0	8.5	7.0	8.5	7.0	6.0	6.0	6.0	5.0	10.0	9.5
29	15.5	14.5	7.0	6.5	7.0	6.5	6.0	5.5	---	---	10.0	9.5
30	15.0	13.0	7.0	6.5	7.0	7.0	5.5	5.0	---	---	10.5	9.5
31	14.5	14.0	---	---	7.0	7.0	5.5	5.0	---	---	10.0	10.0
MONTH	20.0	13.0	16.0	6.5	8.5	6.0	8.0	4.5	8.5	4.0	11.5	5.0

02112000 YADKIN RIVER AT WILKESBORO, N. C.--Continued

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO APRIL 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.0	---	---	---	---	---	---	---	---	---	---
2	11.5	10.0	---	---	---	---	---	---	---	---	---	---
3	11.5	10.5	---	---	---	---	---	---	---	---	---	---
4	11.0	10.5	---	---	---	---	---	---	---	---	---	---
5	11.0	10.5	---	---	---	---	---	---	---	---	---	---
6	11.5	10.0	---	---	---	---	---	---	---	---	---	---
7	10.5	10.5	---	---	---	---	---	---	---	---	---	---
8	11.0	10.5	---	---	---	---	---	---	---	---	---	---
9	10.5	10.0	---	---	---	---	---	---	---	---	---	---
10	10.5	10.0	---	---	---	---	---	---	---	---	---	---
11	11.0	10.0	---	---	---	---	---	---	---	---	---	---
12	11.5	10.0	---	---	---	---	---	---	---	---	---	---
13	11.5	10.0	---	---	---	---	---	---	---	---	---	---
14	11.5	10.0	---	---	---	---	---	---	---	---	---	---
15	11.5	9.5	---	---	---	---	---	---	---	---	---	---
16	11.5	10.0	---	---	---	---	---	---	---	---	---	---
17	10.5	10.0	---	---	---	---	---	---	---	---	---	---
18	10.5	10.0	---	---	---	---	---	---	---	---	---	---
19	11.0	10.5	---	---	---	---	---	---	---	---	---	---
20	11.0	10.5	---	---	---	---	---	---	---	---	---	---
21	12.0	10.5	---	---	---	---	---	---	---	---	---	---
22	12.0	10.5	---	---	---	---	---	---	---	---	---	---
23	11.5	10.5	---	---	---	---	---	---	---	---	---	---
24	12.0	11.0	---	---	---	---	---	---	---	---	---	---
25	11.5	11.0	---	---	---	---	---	---	---	---	---	---
26	13.0	11.0	---	---	---	---	---	---	---	---	---	---
27	13.0	12.0	---	---	---	---	---	---	---	---	---	---
28	13.0	12.0	---	---	---	---	---	---	---	---	---	---
29	13.0	13.0	---	---	---	---	---	---	---	---	---	---
30	13.0	12.5	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	13.0	9.5	---	---	---	---	---	---	---	---	---	---
YEAR	20.0	4.0										

PEE DEE RIVER BASIN

02115051 YADKIN RIVER AT DONNAHA, N. C.

LOCATION.--Lat 36°12'52", long 80°25'57", Forsyth County, at bridge on State Highway 67, 0.8 mile south of Donnaha, and 3.5 miles upstream from Fries Creek.

DRAINAGE AREA.--1,650 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for 1946 water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
20...	1120	2600	10	0	2.7	1.0	4.4	1.0	14	0
20...A	1120	2600	--	--	--	--	--	--	--	--
MAR.										
16...	1350	4200	12	0	2.7	1.4	3.6	1.1	14	0
16...A	1350	4200	--	--	--	--	--	--	--	--
MAY										
17...	1230	3450	15	--	2.6	.9	3.7	1.1	12	0
17...A	1230	3450	--	--	--	--	--	--	12	0

02115051 YADKIN RIVER AT DONNAHA, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
DEC.										
20...	11	3.0	4.0	.0	--	.50	--	.000	38	35
20... A	--	--	--	--	--	--	--	--	--	--
MAR.										
16...	11	4.0	4.2	.1	--	.30	--	.000	36	38
16... A	12	--	--	--	--	--	--	--	--	--
MAY										
17...	10	6.8	2.5	.2	.2	--	.006	.030	34	39
17... A	10	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
DEC.										
20...	.05	267	11	6	44	.6	45	6.1	--	--
20... A	--	--	--	--	--	--	44	--	5.0	11.0
MAR.										
16...	.05	408	12	1	36	.4	44	6.2	--	--
16... A	--	--	--	--	--	--	48	6.1	14.5	21.5
MAY										
17...	.05	317	10	0	41	.5	42	6.5	--	--
17... A	--	--	--	--	--	--	40	6.2	15.5	16.0

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DISSOLVED STRONTIUM (SR) (UG/L)
DEC.					
20...	5	--	18	.04	--
20... A	--	11.1	--	--	--
MAR.					
16...	5	--	14	.07	--
16... A	--	9.9	--	--	--
MAY					
17...	20	--	6.1	.14	60
17... A	--	9.6	12	--	--

02116500 YADKIN RIVER AT YADKIN COLLEGE, N. C.

LOCATION.--Lat 35°51'24", long 80°23'10", Davidson County, water-quality recorder at gaging station near left bank on downstream end of pier of bridge on U.S. Highway 64, 1.5 miles south of Yadkin College, 6.2 miles downstream from Reedy Creek, and 295 miles upstream from mouth of Pee Dee River in Winyah Bay.

DRAINAGE AREA.--2,280 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1943 to September 1944, October 1950 to September 1951, October 1955 to September 1967, water years 1968-70 (partial-record station), October 1970 to September 1973.
Water temperatures: October 1943 to September 1944, October 1950 to September 1951, October 1955 to September 1967, October 1970 to September 1973.
Sediment records: January 1951 to September 1973.

EXTREMES.--1972-73:
Specific conductance: Maximum recorded, 140 micromhos Nov. 8; minimum recorded, 35 micromhos May 30, 31.
pH: Maximum recorded 7.3 units Feb. 25, 27; minimum recorded, 5.6 units May 29.
Dissolved oxygen: Maximum recorded, 12.0 mg/l Nov. 25, Feb. 1, 11, 17, 18, 19, 20; minimum recorded, 3.0 mg/l Nov. 8.
Water temperatures: Maximum recorded, 27.0°C Aug. 16; minimum recorded, 0.5°C Jan. 14.
Sediment concentrations: Maximum daily, 1,340 mg/l Aug. 6; minimum daily, 20 mg/l Jan. 10, 18.
Sediment discharge: Maximum daily, 75,600 tons Feb. 3; minimum daily, 113 tons Oct. 26.

Period of record:
Dissolved solids (1943-44, 1950-51, 1955-67): Maximum, 85 mg/l Nov. 1-10, 1950; minimum, 32 mg/l Mar. 21-31, 1944.
Hardness (1943-44, 1950-51, 1955-67): Maximum, 26 mg/l Mar. 6, 1959; minimum, 8 mg/l Dec. 25, 1962.
Specific conductance (1955-67, 1970-73): Maximum daily, 815 micromhos Aug. 26, 1971; minimum daily, 20 micromhos Nov. 2, 16, 28, Dec. 1, 6, 7, 1971.
Dissolved oxygen (1970-73): Maximum recorded, 13.0 mg/l Jan. 21, 1971; minimum recorded, 0.0 mg/l Oct. 15, 16, 1970.
Water temperatures: Maximum, 31.0°C Aug. 24, 1959; minimum, freezing point on many days during winter months.
Sediment concentrations: Maximum daily, 2,970 mg/l May 26, 1952; minimum daily, 1 mg/l Dec. 3, 1953.
Sediment discharge: Maximum daily, 182,000 tons June 22, 1972; minimum daily, 3 tons Dec. 3, 1953.

REMARKS.--Miscellaneous chemical data published for water years 1947-49, 1955. Considerable data lost during year because of equipment malfunctions.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
NOV.											
01...	1400	1870	13	--	0	--	4.2	1.4	6.0	2.9	23
01... A	1400	1870	--	--	--	--	--	--	--	--	--
FEB.											
21...	1245	3210	13	--	0	--	3.9	1.4	4.7	1.7	19
21... A	1245	3210	--	--	--	--	--	--	--	--	--
SEP.											
06...	1230	--	12	3700	170	10	3.8	1.3	5.0	2.3	25
06... A	1230	--	--	--	--	--	--	--	--	--	19

DATE	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
NOV.											
01...	0	19	3.8	5.0	.1	.50	--	--	--	.18	52
01... A	--	--	--	--	--	--	--	--	--	--	--
FEB.											
21...	0	16	5.0	4.1	.1	.06	--	--	--	.073	49
21... A	--	20	--	--	--	--	--	--	--	--	--
SEP.											
06...	0	21	5.4	4.8	.2	--	.19	.23	1.9	.22	59
06... A	--	16	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.											
01...	51	.07	263	17	0	40	.6	71	6.2	--	--
01... A	--	--	--	--	--	--	--	--	6.9	16.0	21.0
FEB.											
21...	46	.07	425	16	0	37	.5	60	6.2	--	--
21... A	--	--	--	--	--	--	--	--	6.8	6.0	15.5
SEP.											
06...	47	.08	--	15	0	38	.6	57	7.1	26.0	35.0
06... A	--	--	--	--	--	--	--	55	5.7	26.0	35.0

02116500 YADKIN RIVER AT YADKIN COLLEGE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED ORGANIC CARBON (C) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)
NOV.										
01...	15	--	--	23	--	--	--	--	.06	--
01... A	--	--	7.8	--	20000	150	--	--	--	--
FEB.										
21...	10	--	--	19	--	410	--	--	.04	--
21... A	--	--	11.8	--	--	--	--	--	--	--
SEP.										
06...	--	50	--	3.2	--	--	6.0	6.0	--	3
06... A	--	--	7.5	61	--	--	--	--	--	--

DATE	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL NITROGEN (N) (MG/L)
NOV.											
01...	--	--	--	--	--	--	<.5	--	--	--	--
01... A	--	--	--	--	--	--	--	--	--	--	--
FEB.											
21...	--	--	--	--	--	--	<.5	--	--	--	--
21... A	--	--	--	--	--	--	--	--	--	--	--
SEP.											
06...	0	0	0	0	6	3	.0	.0	6	0	.42
06... A	--	--	--	--	--	--	--	--	--	--	--

DATE	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	TOTAL PHOSPHORUS IN BOTTOM DEPOSITS (MG/KG)	ORGANIC CARBON IN BED MATERIAL (C) (G/KG)	TOTAL ARSENIC IN BOTTOM DEPOSITS (UG/G)	TOTAL CADMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL CHROMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL COBALT IN BOTTOM DEPOSITS (UG/G)	TOTAL COPPER IN BOTTOM DEPOSITS (UG/G)
SEP.										
06...	6700	160	1.8	18	2.6	1	0	5	0	30

DATE	TOTAL LEAD IN BOTTOM DEPOSITS (UG/G)	TOTAL MERCURY IN BOTTOM DEPOSITS (UG/G)	TOTAL SELENIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL ZINC IN BOTTOM DEPOSITS (UG/G)
SEP.				
06...	15	.09	26	18

02116500 YADKIN RIVER AT YADKIN COLLEGE, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	60	60	90	80	100	95	65	60	85	65	75	65
2	70	60	95	80	95	90	60	55	65	45	90	75
3	80	70	100	90	95	90	65	55	45	40	---	---
4	80	70	100	90	90	85	80	65	55	40	---	---
5	100	80	100	90	90	85	70	70	45	40	---	---
6	100	80	80	78	90	80	70	65	50	40	50	50
7	90	80	90	80	80	60	65	65	55	45	60	50
8	90	80	140	80	70	60	70	65	60	55	55	50
9	80	80	85	75	80	70	70	65	60	60	50	50
10	90	80	90	85	70	70	100	65	65	60	50	50
11	90	80	95	85	70	70	90	80	60	60	50	50
12	95	90	95	85	80	70	90	80	60	60	60	50
13	100	90	90	85	75	70	80	80	65	60	55	50
14	90	90	105	75	75	70	80	70	75	60	55	55
15	90	80	70	65	70	50	75	70	75	60	60	55
16	80	80	75	65	50	50	80	70	65	60	70	60
17	90	80	90	80	55	50	---	---	65	60	60	45
18	85	85	90	85	60	50	---	---	65	60	---	---
19	100	80	90	80	60	50	---	---	65	55	---	---
20	110	90	95	80	70	60	---	---	65	60	---	---
21	90	90	70	60	75	65	---	---	70	60	---	---
22	100	90	80	75	80	50	---	---	70	65	60	50
23	90	85	85	80	55	50	---	---	70	65	60	50
24	100	90	85	80	55	50	---	---	70	60	60	50
25	90	85	90	85	55	50	---	---	65	60	55	55
26	90	80	100	80	50	50	---	---	60	60	55	45
27	100	85	80	75	55	50	---	---	70	60	50	45
28	115	80	85	80	60	50	---	---	70	60	50	50
29	80	70	90	85	60	55	---	---	---	---	50	50
30	70	70	95	90	65	60	---	---	---	---	60	55
31	80	70	---	---	70	65	---	---	---	---	51	51
MONTH	115	60	140	60	100	50	---	---	85	40	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	55	45	45	40	45	40	---	---	---	---	---	---
2	50	45	45	40	45	40	---	---	---	---	---	---
3	50	50	65	50	45	40	---	---	---	---	---	---
4	50	50	70	50	45	40	---	---	---	---	---	---
5	55	50	50	50	50	50	---	---	---	---	---	---
6	55	50	50	45	50	45	---	---	---	---	---	---
7	50	50	50	45	70	50	---	---	---	---	---	---
8	65	50	65	45	55	50	---	---	---	---	---	---
9	45	40	70	50	60	50	---	---	---	---	---	---
10	50	45	50	45	60	50	---	---	65	60	---	---
11	55	50	50	45	50	45	---	---	70	65	---	---
12	60	50	50	45	50	45	---	---	65	60	---	---
13	60	50	45	45	60	50	---	---	60	60	95	80
14	60	55	45	45	60	55	---	---	70	60	135	80
15	60	50	50	45	55	55	---	---	65	55	90	65
16	55	50	55	45	---	---	---	---	60	55	60	55
17	55	50	55	50	---	---	---	---	70	60	65	60
18	65	55	55	50	---	---	---	---	90	65	60	55
19	60	55	55	50	---	---	---	---	65	50	75	70
20	60	55	55	50	---	---	---	---	55	50	90	85
21	55	50	50	45	---	---	---	---	60	55	90	85
22	50	50	55	45	---	---	---	---	90	60	95	85
23	50	45	50	45	---	---	---	---	80	70	85	80
24	50	50	65	55	---	---	---	---	---	---	85	80
25	55	45	55	45	---	---	---	---	---	---	80	75
26	60	50	55	45	---	---	---	---	---	---	80	75
27	65	45	55	45	---	---	---	---	---	---	90	80
28	45	40	55	40	---	---	---	---	---	---	95	85
29	45	40	50	45	---	---	---	---	---	---	100	85
30	45	40	45	35	---	---	---	---	---	---	95	80
31	---	---	40	35	---	---	---	---	---	---	---	---
MONTH	65	40	70	35	---	---	---	---	---	---	---	---
YEAR	140	35										

02116500 YADKIN RIVER AT YADKIN COLLEGE, N. C.--Continued

PH (UNITS), OCTOBER 1972 TO JUNE 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.2	6.0	6.6	6.5	6.7	6.6	---	---	---	---	6.8	6.5
2	6.4	6.2	6.7	6.3	6.8	6.7	---	---	---	---	6.5	6.2
3	6.5	6.4	6.6	6.2	6.7	6.6	---	---	---	---	---	---
4	6.5	6.5	6.7	6.7	6.7	6.6	---	---	---	---	---	---
5	6.6	6.5	6.7	6.6	---	---	---	---	---	---	---	---
6	6.6	6.6	6.8	6.7	---	---	---	---	---	---	---	---
7	6.6	6.6	6.8	6.7	---	---	---	---	6.9	6.8	---	---
8	6.6	6.5	6.8	6.5	---	---	---	---	6.9	6.7	---	---
9	6.6	6.5	6.8	6.7	---	---	---	---	6.9	6.8	---	---
10	6.6	6.5	6.6	6.6	---	---	---	---	7.0	6.8	---	---
11	6.6	6.6	6.6	6.6	---	---	---	---	7.0	6.9	---	---
12	6.6	6.5	6.6	6.6	---	---	---	---	7.1	7.0	---	---
13	6.5	6.5	6.6	6.6	---	---	---	---	---	---	---	---
14	6.5	6.5	6.6	6.2	---	---	---	---	---	---	---	---
15	6.5	6.4	6.2	6.1	---	---	---	---	---	---	---	---
16	6.4	6.4	6.5	6.2	---	---	---	---	---	---	---	---
17	6.5	6.4	6.6	6.5	---	---	---	---	---	---	---	---
18	6.5	6.4	6.6	6.5	---	---	---	---	---	---	---	---
19	6.5	6.4	6.6	6.5	---	---	---	---	---	---	---	---
20	6.5	6.5	6.5	6.4	---	---	---	---	---	---	---	---
21	6.6	6.5	6.6	6.4	---	---	---	---	7.1	6.8	---	---
22	6.6	6.5	6.6	6.5	---	---	---	---	7.1	6.9	---	---
23	6.5	6.4	6.7	6.6	---	---	---	---	7.2	7.0	---	---
24	6.4	6.4	6.7	6.6	---	---	---	---	7.2	6.7	---	---
25	6.6	6.4	6.8	6.8	---	---	---	---	7.3	7.0	---	---
26	6.6	6.5	6.7	6.3	---	---	---	---	7.2	7.1	---	---
27	6.6	6.6	6.7	6.5	---	---	---	---	7.3	6.8	---	---
28	6.6	6.5	6.7	6.5	---	---	---	---	6.8	6.7	---	---
29	6.6	6.5	6.8	6.7	---	---	---	---	---	---	6.7	6.6
30	6.6	6.5	6.8	6.6	---	---	---	---	---	---	6.7	6.6
31	6.6	6.5	---	---	---	---	---	---	---	---	6.7	6.5
MONTH	6.6	6.0	6.8	5.8	---	---	---	---	---	---	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.6	6.1	6.3	6.3	6.3	6.3	---	---	---	---	---	---
2	6.5	6.4	6.3	6.2	6.3	6.3	---	---	---	---	---	---
3	6.4	6.4	6.3	6.3	6.3	6.3	---	---	---	---	---	---
4	6.5	6.4	6.4	6.3	6.4	6.3	---	---	---	---	---	---
5	6.5	6.4	6.4	6.3	6.4	6.4	---	---	---	---	---	---
6	6.5	6.4	6.4	6.4	6.4	6.4	---	---	---	---	---	---
7	6.5	6.4	6.3	6.3	6.5	6.4	---	---	---	---	---	---
8	6.5	6.4	6.3	6.2	6.4	6.4	---	---	---	---	---	---
9	6.5	6.4	6.2	6.2	6.4	6.4	---	---	---	---	---	---
10	6.5	6.4	6.2	6.2	6.4	6.4	---	---	---	---	---	---
11	6.5	6.5	6.3	6.2	6.4	6.4	---	---	---	---	---	---
12	6.5	6.5	6.2	6.1	6.4	6.4	---	---	---	---	---	---
13	6.5	6.4	6.2	6.1	6.4	6.4	---	---	---	---	---	---
14	6.5	6.4	6.3	6.2	6.4	6.4	---	---	---	---	---	---
15	6.5	6.4	6.4	6.2	6.4	6.4	---	---	---	---	---	---
16	6.5	6.4	6.4	6.2	---	---	---	---	---	---	---	---
17	6.5	6.4	6.4	6.4	---	---	---	---	---	---	---	---
18	6.4	6.3	6.4	6.4	---	---	---	---	---	---	---	---
19	6.5	6.4	6.4	6.4	---	---	---	---	---	---	---	---
20	6.5	6.5	6.4	6.4	---	---	---	---	---	---	---	---
21	6.5	6.4	6.4	6.3	---	---	---	---	---	---	---	---
22	6.5	6.1	6.4	6.3	---	---	---	---	---	---	---	---
23	6.5	6.4	6.3	6.2	---	---	---	---	---	---	---	---
24	6.5	6.5	6.2	6.2	---	---	---	---	---	---	---	---
25	6.5	6.5	6.2	6.1	---	---	---	---	---	---	---	---
26	6.5	6.4	6.2	6.1	---	---	---	---	---	---	---	---
27	6.5	6.2	6.2	6.2	---	---	---	---	---	---	---	---
28	6.1	6.0	6.2	5.9	---	---	---	---	---	---	---	---
29	6.4	6.1	5.9	5.6	---	---	---	---	---	---	---	---
30	6.4	6.3	6.2	5.9	---	---	---	---	---	---	---	---
31	---	---	6.3	6.2	---	---	---	---	---	---	---	---
MTH	6.6	6.0	6.4	5.6	---	---	---	---	---	---	---	---
EAR	7.3	5.6										

02116500 YADKIN RIVER AT YADKIN COLLEGE, N. C.--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITER, OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	6.6	8.3	8.0	10.5	10.2	9.9	9.6	12.0	11.7	9.6	9.2
2	7.9	7.7	8.3	7.7	10.4	10.0	9.8	9.5	11.7	10.1	9.2	8.3
3	7.8	7.2	7.7	6.6	10.4	10.1	9.8	9.6	10.4	10.1	8.5	7.1
4	7.6	6.7	6.7	6.0	10.3	10.1	10.3	9.8	11.6	9.9	8.6	8.5
5	6.8	6.0	6.6	6.4	10.2	9.7	10.3	9.7	11.8	11.6	8.5	8.1
6	6.5	6.0	7.3	7.1	9.7	9.1	9.8	9.4	11.7	11.6	9.5	8.3
7	---	---	7.2	6.9	10.7	9.3	10.4	9.6	11.7	10.9	10.2	9.4
8	---	---	7.2	3.0	10.7	10.2	11.3	10.4	10.9	10.3	10.1	9.5
9	7.5	6.9	7.4	6.9	10.7	10.2	11.5	11.0	10.5	10.1	9.8	9.6
10	7.6	7.4	6.4	6.1	10.6	10.1	11.3	10.9	11.3	10.3	9.6	9.3
11	7.7	7.2	6.1	5.9	10.2	10.0	10.9	10.3	12.0	11.3	9.8	9.6
12	7.4	6.9	6.1	5.1	10.2	9.6	10.4	10.1	11.9	11.7	9.9	9.2
13	7.1	6.4	6.9	6.2	10.3	9.2	10.7	10.4	11.9	11.5	9.2	8.9
14	6.6	5.8	7.0	4.2	9.4	8.7	10.9	10.7	11.5	10.9	8.9	8.2
15	6.3	6.0	9.1	8.1	10.1	8.9	10.8	10.4	11.7	10.5	8.2	7.4
16	6.7	6.3	9.3	9.1	10.2	9.5	10.4	10.0	11.5	10.8	7.4	6.0
17	6.6	6.1	9.8	9.4	11.3	10.2	---	---	12.0	10.6	7.3	6.3
18	6.5	6.0	10.5	9.8	11.9	11.3	---	---	12.0	11.8	---	---
19	6.4	6.0	11.0	10.5	11.9	11.6	---	---	12.0	12.0	---	---
20	7.5	5.8	11.5	10.4	11.6	10.6	---	---	12.0	11.1	---	---
21	8.0	7.3	11.5	11.4	10.6	9.4	---	---	11.2	10.9	---	---
22	---	---	11.2	11.1	10.0	9.2	---	---	11.0	10.3	9.4	9.3
23	---	---	11.5	11.1	9.9	9.6	---	---	10.4	9.9	9.3	8.7
24	---	---	11.8	11.4	9.9	9.7	---	---	9.9	9.6	8.7	8.5
25	---	---	12.0	11.7	9.9	9.7	---	---	10.3	9.8	8.6	8.3
26	8.1	7.8	11.9	10.8	9.9	9.6	---	---	10.1	9.8	9.0	8.6
27	8.3	8.0	11.8	11.5	10.5	9.9	---	---	10.2	9.0	9.1	8.9
28	8.5	6.9	11.6	11.2	10.6	10.5	---	---	9.9	9.1	9.6	9.0
29	9.3	8.3	11.3	10.5	10.7	10.5	---	---	---	---	9.5	9.3
30	9.1	8.7	11.0	10.3	10.7	10.5	---	---	---	---	10.0	9.4
31	8.6	8.2	---	---	10.5	9.9	---	---	---	---	10.0	9.2
MONTH	9.3	5.8	12.0	3.0	11.9	8.7	---	---	12.0	9.0	10.2	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	8.9	9.7	9.2	8.2	7.3	---	---	---	---	---	---
2	9.5	9.1	9.2	8.4	8.1	7.9	---	---	---	---	---	---
3	9.3	9.0	8.4	6.9	8.0	7.6	---	---	---	---	---	---
4	9.2	8.6	8.4	6.0	7.2	7.1	---	---	---	---	---	---
5	9.2	8.5	8.6	8.2	7.4	6.5	---	---	---	---	---	---
6	9.5	9.0	8.5	8.3	7.1	6.7	---	---	---	---	---	---
7	9.5	9.0	8.5	8.4	7.5	6.6	---	---	---	---	---	---
8	10.0	8.6	8.3	7.1	7.6	7.4	---	---	---	---	---	---
9	10.0	9.9	8.0	7.0	6.9	6.4	---	---	---	---	---	---
10	10.0	9.8	7.9	7.2	7.2	6.5	---	---	7.2	7.0	---	---
11	10.2	9.9	8.1	7.1	7.2	6.9	---	---	7.2	6.9	---	---
12	10.0	9.9	7.7	7.4	7.5	7.2	---	---	7.6	7.0	---	---
13	9.9	9.2	7.9	7.1	7.4	5.9	---	---	7.6	7.2	8.1	8.0
14	9.4	9.1	7.9	7.2	6.4	6.0	---	---	7.6	7.1	8.4	7.6
15	9.2	9.0	8.2	7.8	6.6	6.4	---	---	7.8	7.4	9.0	8.0
16	9.1	8.8	8.9	8.3	---	---	---	---	9.0	7.5	8.4	7.4
17	9.1	8.9	8.5	7.9	---	---	---	---	7.9	7.6	8.7	7.5
18	8.8	8.6	8.8	8.2	---	---	---	---	7.9	7.3	8.5	7.8
19	8.8	8.3	8.7	8.0	---	---	---	---	8.5	7.8	8.7	8.1
20	8.5	8.1	8.0	7.6	---	---	---	---	8.3	7.6	9.4	7.7
21	8.3	8.1	8.5	7.7	---	---	---	---	8.6	7.2	10.1	9.1
22	8.3	8.1	8.6	7.9	---	---	---	---	9.0	7.6	10.3	9.2
23	8.2	8.0	8.3	7.1	---	---	---	---	9.1	8.7	10.2	9.7
24	8.3	8.0	7.1	6.4	---	---	---	---	---	---	10.0	9.5
25	8.0	7.4	7.7	6.9	---	---	---	---	---	---	9.7	9.4
26	7.8	7.1	7.6	7.2	---	---	---	---	---	---	---	---
27	8.1	6.7	8.1	7.6	---	---	---	---	---	---	---	---
28	8.2	7.3	7.6	5.9	---	---	---	---	---	---	---	---
29	9.6	7.9	7.3	6.8	---	---	---	---	---	---	---	---
30	9.6	9.2	8.4	7.3	---	---	---	---	---	---	---	---
31	---	---	8.1	7.9	---	---	---	---	---	---	---	---
MONTH	10.2	6.7	9.7	5.9	---	---	---	---	---	---	---	---
YEAR	12.0	3.0										

02116500 YADKIN RIVER AT YADKIN COLLEGE, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	19.0	15.5	14.0	7.0	6.5	9.5	8.0	4.0	3.5	7.0	6.0
2	19.5	16.5	16.5	14.5	8.0	6.5	9.5	9.0	6.5	4.0	7.5	6.0
3	18.5	16.5	18.5	16.0	8.0	6.5	9.0	7.0	6.0	5.5	8.5	7.5
4	18.0	17.0	19.0	18.0	8.0	6.5	7.0	6.5	6.0	5.5	9.0	8.5
5	19.5	18.0	17.0	16.5	9.0	7.0	7.0	6.5	5.5	5.0	10.5	9.0
6	19.0	18.0	15.0	14.0	10.0	9.0	7.0	6.5	5.5	5.0	10.5	10.5
7	19.5	18.0	14.0	13.0	10.0	9.5	6.5	4.5	6.0	5.0	10.5	9.5
8	18.5	16.5	13.5	12.0	9.5	8.5	4.5	2.0	6.5	6.0	9.5	9.0
9	18.5	16.5	13.5	11.5	8.5	8.0	3.0	1.5	6.0	4.5	10.5	9.5
10	17.0	15.5	13.0	11.0	10.0	8.5	2.0	1.5	4.5	3.0	11.5	10.5
11	16.5	15.0	13.5	12.0	10.0	10.0	3.0	1.5	3.0	2.0	11.5	11.0
12	17.0	15.0	13.5	12.0	10.0	9.0	3.0	1.5	3.0	1.5	12.0	11.0
13	18.5	16.0	13.0	12.0	9.0	8.5	2.0	1.0	3.0	1.5	13.0	11.5
14	19.5	17.0	14.5	13.0	9.0	9.0	1.5	0.5	3.5	2.5	13.5	11.5
15	19.0	18.0	13.0	11.5	9.0	7.0	3.0	1.0	3.5	3.5	14.0	13.0
16	17.0	16.5	11.5	10.0	7.0	5.5	3.5	2.0	4.5	3.5	14.0	13.5
17	17.0	16.5	10.0	9.5	5.5	4.0	---	---	3.5	2.0	14.0	13.0
18	16.5	16.0	9.5	9.0	4.0	3.0	---	---	2.5	1.5	---	---
19	15.5	14.5	9.0	9.0	3.5	2.0	---	---	3.0	1.0	---	---
20	14.5	12.0	9.0	8.5	5.5	3.5	---	---	3.5	1.5	---	---
21	12.0	11.0	9.0	8.5	7.0	5.5	---	---	3.5	2.5	---	---
22	13.0	11.0	8.5	8.0	8.5	7.0	---	---	4.5	3.0	8.5	8.0
23	13.5	12.0	8.0	7.0	9.0	8.5	---	---	5.0	3.5	9.0	8.0
24	15.0	13.5	7.0	6.0	9.0	9.0	---	---	5.5	4.0	10.0	8.0
25	15.0	14.5	6.0	5.5	9.5	9.0	---	---	6.5	4.5	9.5	9.0
26	15.0	14.5	6.0	5.5	9.0	9.5	---	---	7.0	6.0	10.0	9.5
27	14.5	13.5	7.0	5.5	8.5	7.0	---	---	7.0	6.5	10.0	10.0
28	15.0	13.5	7.0	6.0	7.0	6.5	---	---	6.5	6.0	10.5	9.5
29	15.5	14.0	7.0	6.5	6.5	6.0	---	---	---	---	10.5	10.0
30	15.0	13.5	7.0	6.5	6.5	6.0	---	---	---	---	10.5	9.5
31	15.0	14.0	---	---	8.0	6.5	---	---	---	---	11.5	10.5
MONTH	20.0	11.0	19.0	5.5	10.0	2.0	---	---	7.0	1.0	14.0	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	12.0	14.5	13.5	18.5	18.0	---	---	---	---	---	---
2	13.0	13.0	15.5	15.0	19.5	18.0	---	---	---	---	---	---
3	13.0	12.0	16.0	15.5	20.5	18.5	---	---	---	---	---	---
4	13.5	12.0	15.5	15.0	21.0	19.5	---	---	---	---	---	---
5	13.0	11.5	15.5	14.0	23.0	21.0	---	---	---	---	---	---
6	12.0	11.0	15.5	14.0	23.0	21.0	---	---	---	---	---	---
7	11.5	11.0	15.5	14.0	21.0	20.5	---	---	---	---	---	---
8	10.5	10.5	15.5	15.0	21.5	20.5	---	---	---	---	---	---
9	10.5	10.0	16.0	15.5	22.0	21.0	---	---	---	---	---	---
10	10.0	9.5	16.5	15.5	23.5	21.5	---	---	25.5	24.0	---	---
11	9.5	8.5	18.5	16.0	23.5	22.0	---	---	26.0	24.5	---	---
12	12.0	10.5	18.0	17.0	23.5	22.0	---	---	26.0	24.5	---	---
13	10.5	9.0	18.0	16.5	23.5	21.5	---	---	25.5	24.5	23.0	23.0
14	11.0	9.5	18.0	16.0	23.5	21.5	---	---	25.5	24.5	24.0	23.0
15	13.0	10.0	17.0	16.0	23.0	22.0	---	---	25.0	24.5	23.5	22.0
16	13.5	11.0	16.5	15.0	---	---	---	---	27.0	23.5	23.0	21.0
17	13.0	12.0	16.0	15.0	---	---	---	---	24.0	23.5	23.0	21.0
18	13.5	13.0	15.0	14.0	---	---	---	---	24.0	23.5	23.0	21.5
19	14.5	13.5	15.5	14.5	---	---	---	---	23.5	22.0	22.0	21.0
20	15.5	13.5	16.5	15.0	---	---	---	---	23.5	22.0	21.5	20.5
21	16.5	15.0	17.0	15.5	---	---	---	---	25.5	24.5	21.5	20.0
22	18.0	15.5	17.0	16.0	---	---	---	---	21.5	21.0	22.0	20.5
23	18.0	16.5	19.5	18.0	---	---	---	---	22.0	21.0	23.0	21.0
24	19.0	16.5	19.5	19.5	---	---	---	---	---	---	23.5	21.5
25	19.0	16.5	19.5	18.5	---	---	---	---	---	---	23.5	23.0
26	18.0	16.5	19.5	18.0	---	---	---	---	---	---	23.0	22.0
27	16.5	13.5	19.5	18.0	---	---	---	---	---	---	22.0	21.5
28	13.5	12.0	18.0	18.0	---	---	---	---	---	---	23.0	21.0
29	13.0	12.0	18.0	17.0	---	---	---	---	---	---	23.5	22.0
30	13.5	12.0	19.0	18.0	---	---	---	---	---	---	23.0	22.0
31	---	---	19.0	18.0	---	---	---	---	---	---	---	---
MONTH	19.0	8.5	19.5	13.5	---	---	---	---	---	---	---	---
YEAR	27.0	0.5										

02116500 YADKIN RIVER AT YADKIN COLLEGE, N. C.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6180	777	13000	1850	40	200	2960	65	519
2	2830	321	2450	1850	29	145	2810	60	455
3	2080	150	842	1820	38	187	2590	55	385
4	1920	98	508	1820	40	197	2510	60	407
5	1860	81	407	1780	40	192	2450	30	198
6	2220	91	545	1740	56	263	2660	45	323
7	2200	89	529	1700	55	252	6360	360	6180
8	1900	65	333	2960	189	1510	4090	270	2980
9	1740	60	282	3500	178	1680	3450	210	1960
10	1700	45	207	2300	85	528	3310	210	1880
11	1670	45	203	1980	80	428	3110	170	1430
12	1660	45	202	1890	80	408	3050	135	1110
13	1660	39	175	1820	100	491	2920	260	2050
14	1710	45	208	7690	1060	22000	2830	435	3320
15	1700	39	179	12300	948	31500	7570	700	14300
16	1680	51	231	4340	353	4140	18900	960	49000
17	1670	38	171	3290	195	1730	7200	340	6610
18	1670	40	180	2920	117	922	4970	140	1880
19	1710	41	189	2720	107	786	4380	185	2190
20	1990	47	253	5930	530	8490	3760	110	1120
21	1850	41	205	4990	342	4610	3470	80	750
22	1720	28	130	3410	137	1260	12900	800	27900
23	1710	30	139	2960	95	759	11100	420	12600
24	1750	39	184	2700	78	569	5910	280	4470
25	1770	35	167	2640	15	107	4810	145	1880
26	1740	24	113	4480	155	1870	4550	185	2270
27	1700	27	124	4210	190	2160	4080	190	2090
28	2070	48	268	3210	140	1210	3590	80	775
29	2960	91	727	2860	100	772	3320	90	807
30	2360	79	503	2760	50	373	3190	80	689
31	1960	58	307	--	--	--	3240	70	612
TOTAL	63340	--	23961	100420	--	89739	152040	--	153140

	JANUARY			FEBRUARY			MARCH		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3250	160	1400	3630	183	1790	3970	195	2090
2	3090	60	501	13500	1240	45200	3490	80	754
3	2980	45	362	31200	898	75500	4420	150	1790
4	3700	50	500	15300	398	16400	6380	370	6370
5	3830	120	1240	10200	377	10400	6330	290	4960
6	3480	150	1410	9370	337	8530	6710	308	5580
7	3180	60	515	6220	298	5000	7150	338	6530
8	3100	50	419	4930	298	3970	7570	300	6130
9	3080	40	333	4630	289	3610	9690	540	14100
10	3000	20	162	4290	265	3070	6450	300	5220
11	2930	30	237	3930	249	2640	5580	170	2560
12	2770	60	449	3770	259	2640	5950	235	3780
13	2660	30	215	3490	283	2670	5450	140	2060
14	2530	50	342	3580	298	2880	5120	150	2070
15	2680	50	362	5090	296	4070	4560	115	1420
16	2870	60	465	4730	203	2590	5050	300	4090
17	2820	40	305	4110	95	1050	15500	880	36800
18	2780	20	150	3680	59	586	20200	620	33800
19	2870	30	232	3470	65	609	10600	300	8590
20	3060	50	413	3470	49	459	10200	250	6890
21	2990	40	323	3430	46	426	7770	255	5350
22	5120	565	7810	3350	39	353	6320	300	5120
23	9730	705	18500	3290	35	311	5490	175	2590
24	5800	400	6260	3230	25	218	4790	140	1810
25	4880	190	2500	3210	25	217	4540	160	1960
26	4340	160	1870	3160	25	213	7000	525	9920
27	4870	190	2500	3220	110	956	10800	520	15200
28	6080	325	5340	4310	120	1400	6810	330	6070
29	6380	415	7150	--	--	--	5440	240	3530
30	4940	230	3070	--	--	--	5300	370	5290
31	4120	180	2000	--	--	--	5930	455	7290
TOTAL	119910	--	67335	169790	--	197858	220560	--	219714

02116500 YADKIN RIVER AT YADKIN COLLEGE, N. C.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL			MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	11700	580	18300	9400	430	10900	8130	275	6040
2	8940	320	7720	6920	280	5230	5150	250	3480
3	6490	240	4210	5040	165	2250	4500	210	2550
4	5520	220	3280	5560	290	4350	4350	170	2000
5	5540	140	2090	5100	430	5920	4130	160	1780
6	5080	165	2260	4570	385	4750	3900	255	2690
7	4750	260	3330	4330	160	1870	4440	220	2640
8	7480	320	6460	4460	100	1200	4280	210	2430
9	7260	310	6080	6580	120	2130	3960	205	2190
10	7030	270	5120	6810	150	2760	3600	120	1170
11	5740	170	2630	5610	165	2500	3640	120	1180
12	5160	130	1810	5020	160	2170	3500	140	1320
13	4760	100	1290	4680	115	1450	3480	115	1080
14	4550	90	1110	4240	95	1090	3430	135	1250
15	4410	105	1250	4170	100	1130	4050	170	1860
16	4230	115	1310	3970	100	1070	5040	620	8440
17	4170	145	1630	3910	140	1480	4690	795	10100
18	4230	145	1660	3900	90	948	4690	390	4940
19	4310	170	1980	3810	110	1130	4350	530	6220
20	4160	110	1240	3630	140	1370	4060	270	2960
21	4050	125	1370	3750	130	1320	4790	240	3100
22	4010	70	758	3630	75	735	4550	500	6140
23	3880	85	890	3540	90	860	5460	985	14500
24	3860	180	1880	3910	85	897	5500	810	12000
25	3790	75	767	4520	130	1590	4400	780	9270
26	4050	105	1150	4330	165	1930	3440	230	2140
27	10800	500	14600	3770	205	2090	3320	135	1210
28	22100	630	37600	10300	1020	28400	3380	130	1190
29	11800	350	11200	20900	1080	60900	4890	435	5740
30	10300	350	9730	12100	420	13700	4460	560	6740
31	--	--	--	9310	265	6660	--	--	--
TOTAL	194150	--	154705	181770	--	174780	131560	--	128350

	JULY			AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3550	260	2490	2870	100	775	2300	41	255
2	3460	200	1870	6450	500	8710	2250	45	273
3	3250	150	1320	6930	800	15000	2250	40	243
4	3240	210	1840	6500	585	10300	2260	50	305
5	3530	130	1240	8240	705	15700	2380	55	353
6	3400	255	2340	14100	1340	51000	3790	100	1020
7	3050	195	1610	5790	670	10500	2860	155	1200
8	2850	110	846	6800	560	10300	2300	130	807
9	2830	100	764	6230	355	5970	2210	50	298
10	2810	140	1060	4040	270	2950	2250	50	304
11	3270	320	2830	3300	290	2580	2670	85	613
12	3110	110	924	3690	260	2590	2530	70	478
13	2970	115	922	3600	240	2330	2260	50	305
14	2570	160	1110	3110	300	2520	2470	90	600
15	4090	820	9060	4390	780	9250	4130	125	1390
16	4830	540	7040	4850	590	7730	3780	135	1380
17	4950	340	4540	3720	300	3010	2610	110	775
18	5190	530	7430	3600	230	2240	2350	75	476
19	3430	280	2590	6930	720	13500	2280	50	308
20	2990	110	888	4570	455	5610	2220	50	300
21	2860	105	811	3210	190	1650	2170	48	281
22	3060	150	1240	3260	170	1500	2150	50	290
23	3720	460	4620	3020	120	978	2100	40	227
24	3330	560	5030	2870	105	814	2100	45	255
25	3180	255	2190	2770	105	785	2050	70	387
26	3680	190	1890	2560	80	553	2060	40	222
27	3620	290	2830	2520	70	476	2060	40	222
28	3420	240	2220	2540	70	480	2040	45	248
29	3220	200	1740	2500	60	405	2040	40	220
30	2750	120	891	2400	65	421	2150	50	290
31	2600	100	702	2320	65	407	--	--	--
TOTAL	104810	--	76878	139680	--	191034	73070	--	14325

TOTAL DISCHARGE FOR YEAR (CFS-DAYS).....1651100
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS).....1491819

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, N. C.

LOCATION.--Lat 35°50'39", long 80°39'38", Rowan County, temperature recorder at gaging station on right bank at downstream side of bridge on Secondary Road 1972, 1.0 mile upstream from Little Creek, 4.0 miles downstream from Fifth Creek, 4.5 miles upstream from Hunting Creek, and 6.5 miles southwest of Mocksville.

DRAINAGE AREA.--313 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1953 to September 1954, October 1960 to August 1967.
Water temperatures: October 1960 to September 1969, August 1971 to April 1973 (discontinued).
Sediment records: January 1958 to December 1967.

EXTREMES.--October 1972 to April 1973:
Water temperatures: Maximum, 20.0°C Oct. 1; minimum, 1.0°C Jan. 14, 15.

Period of record:
Dissolved solids (1960-67): Maximum, 158 mg/l June 3-11, 1961; minimum, 34 mg/l May 1-31, 1965.
Hardness (1960-67): Maximum, 103 mg/l June 3-11, 1961; minimum, 12 mg/l Mar. 1-31, 1962 and Mar. 1-31, 1965.
Specific conductance (1960-67): Maximum daily, 239 micromhos June 7, 1961; minimum daily, 23 micromhos Oct. 15, 1964.
Water temperatures: Maximum, 26.5°C Aug. 24, 25, 1968, July 6, 7, 1969; minimum, freezing point on many days in 1961 and 1963-64.
Sediment concentrations: Maximum daily, 2,580 mg/l Dec. 12, 1967; minimum daily, 3 mg/l Dec. 31, 1965.
Sediment discharge: Maximum daily, 9,200 tons Dec. 12, 1967; minimum daily, 1 ton Dec. 31, 1965.

REMARKS.--Miscellaneous chemical data published for water years 1955-58, 1960. Temperature data collected at this site October 1969 to July 1971 are unreliable and are not published.

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO APRIL 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.0	17.0	13.0	12.0	5.5	5.5	9.5	8.0	4.5	4.0	9.5	9.0
2	17.0	14.5	14.0	12.0	5.5	5.0	9.5	9.5	6.0	4.0	9.5	9.0
3	14.5	14.5	15.5	14.0	5.5	5.0	9.5	8.0	6.5	6.0	10.0	9.5
4	14.5	14.0	16.0	15.5	5.5	5.0	8.0	7.0	6.5	6.0	10.5	9.5
5	15.5	14.5	16.0	14.0	6.5	5.5	7.0	7.0	6.0	6.0	12.0	10.5
6	15.5	15.5	14.0	12.0	8.0	6.5	7.0	7.0	6.0	6.0	12.0	12.0
7	15.5	15.5	12.0	11.0	8.5	8.0	7.0	5.5	6.0	6.0	12.0	12.0
8	15.5	15.0	11.0	11.0	8.5	7.0	5.5	3.0	6.0	6.0	12.0	12.0
9	15.0	14.5	11.0	11.0	7.0	7.0	3.0	1.5	6.0	6.0	12.0	12.0
10	14.5	13.0	11.0	10.5	8.5	7.0	2.0	1.5	6.0	4.5	13.0	12.0
11	13.0	12.0	10.5	10.5	9.0	8.5	2.0	1.5	4.5	3.5	13.0	13.0
12	12.0	11.5	10.5	10.5	9.0	6.5	1.5	1.5	4.0	3.5	13.0	13.0
13	14.0	12.0	10.5	10.5	8.5	8.0	1.5	1.5	4.0	3.5	14.0	13.0
14	14.5	14.0	11.5	10.5	8.5	8.5	1.5	1.0	4.5	4.0	14.5	13.0
15	15.0	14.5	11.5	11.5	8.5	6.5	1.5	1.0	5.5	4.5	15.0	14.5
16	15.0	14.5	11.5	9.5	6.5	5.0	3.0	1.5	5.5	5.0	15.0	15.0
17	14.5	14.0	9.5	8.5	5.5	4.0	3.0	2.0	5.5	5.0	15.0	14.5
18	14.5	14.0	8.5	8.5	4.0	3.0	4.0	3.0	5.0	4.0	14.5	13.0
19	14.0	12.0	8.5	8.5	3.0	2.0	5.5	4.0	4.0	4.0	13.0	11.5
20	12.0	10.0	8.5	8.5	4.0	1.5	5.5	5.5	4.5	4.0	11.5	11.0
21	10.0	9.0	9.5	9.5	6.0	4.0	5.5	5.5	5.0	4.5	11.0	11.0
22	9.5	9.0	8.5	8.0	6.5	6.0	5.5	5.5	5.5	5.0	11.0	10.5
23	10.5	9.5	8.0	7.0	7.0	6.5	6.0	5.5	6.0	5.0	10.5	10.0
24	12.0	10.5	7.0	6.0	7.0	7.0	6.0	6.0	6.5	6.0	11.0	10.0
25	13.0	12.0	6.0	5.0	7.0	7.0	6.0	5.5	7.0	6.5	11.0	11.0
26	14.0	13.0	5.5	5.0	8.0	8.0	5.5	5.0	8.5	7.0	11.5	11.0
27	13.0	12.0	5.5	5.0	9.5	8.0	6.0	5.0	9.5	9.5	12.0	11.5
28	12.0	11.5	5.0	5.0	8.0	7.0	6.0	6.0	9.5	9.5	13.0	12.0
29	12.0	11.5	5.5	5.0	7.0	6.0	6.0	6.0	---	---	13.0	13.0
30	12.0	12.0	5.5	5.5	6.5	6.0	6.0	5.0	---	---	13.0	12.0
31	12.0	12.0	---	---	8.0	6.5	5.0	4.0	---	---	14.0	13.0
MONTH	20.0	9.0	16.0	5.0	9.5	1.5	9.5	1.0	9.5	3.5	15.0	9.0

02118000 SOUTH YADKIN RIVER NEAR MOCKSVILLE, N. C.--Continued

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO APRIL 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	14.0	---	---	---	---	---	---	---	---	---	---
2	14.5	14.0	---	---	---	---	---	---	---	---	---	---
3	14.5	14.0	---	---	---	---	---	---	---	---	---	---
4	14.5	14.0	---	---	---	---	---	---	---	---	---	---
5	14.5	13.0	---	---	---	---	---	---	---	---	---	---
6	13.0	12.0	---	---	---	---	---	---	---	---	---	---
7	13.0	12.0	---	---	---	---	---	---	---	---	---	---
8	12.0	12.0	---	---	---	---	---	---	---	---	---	---
9	12.0	12.0	---	---	---	---	---	---	---	---	---	---
10	12.0	11.5	---	---	---	---	---	---	---	---	---	---
11	11.5	10.5	---	---	---	---	---	---	---	---	---	---
12	11.0	10.5	---	---	---	---	---	---	---	---	---	---
13	11.5	10.5	---	---	---	---	---	---	---	---	---	---
14	11.5	11.0	---	---	---	---	---	---	---	---	---	---
15	12.0	11.5	---	---	---	---	---	---	---	---	---	---
16	13.0	12.0	---	---	---	---	---	---	---	---	---	---
17	13.0	13.0	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	20.0	1.0										

PEE DEE RIVER BASIN

02120668 SOUTH YADKIN RIVER NEAR FRANKLIN, N. C.

LOCATION.--Lat 35°46'49", long 80°30'24", Davie County, at bridge on U.S. Highway 601, 1.5 miles downstream from Third Creek, and 4 miles north of Franklin.

DRAINAGE AREA.--760 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
20...	0915	480	14	0	3.4	2.3	3.2	1.8	18	0
20... A	0915	480	--	--	--	--	--	--	--	--
MAR.										
16...	0930	3370	12	16	4.6	2.5	2.9	1.9	19	0
16... A	0930	3370	--	--	--	--	--	--	--	--
MAY										
17...	0845	990	16	--	4.4	1.8	3.7	1.4	21	0
17... A	0845	990	--	--	--	--	--	--	24	0

02120668 SOUTH YADKIN RIVER NEAR FRANKLIN, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
DEC.										
20...	15	5.0	4.8	.1	--	.30	--	.000	47	45
20... A	--	--	--	--	--	--	--	--	--	--
MAR.										
16...	16	6.4	4.0	.2	--	.70	--	.038	58	42
16... A	18	--	--	--	--	--	--	--	--	--
MAY										
17...	17	2.9	2.5	.2	.3	--	.006	.020	46	43
17... A	20	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
DEC.										
20...	.06	60.9	18	3	26	.3	56	6.1	--	--
20... A	--	--	--	--	--	--	70	--	5.0	11.0
MAR.										
16...	.08	528	22	7	21	.3	65	6.0	--	--
16... A	--	--	--	--	--	--	60	6.7	15.0	16.0
MAY										
17...	.06	123	18	1	29	.4	60	6.5	--	--
17... A	--	--	--	--	--	--	58	6.7	15.5	13.5

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DISSOLVED STRONTIUM (SR) (UG/L)
DEC.					
20...	10	--	23	.10	--
20... A	--	10.8	--	--	--
MAR.					
16...	60	--	30	.05	--
16... A	--	9.5	--	--	--
MAY					
17...	20	--	11	.11	60
17... A	--	8.7	7.7	--	--

02122500 YADKIN RIVER AT HIGH ROCK, N. C.

LOCATION.--Lat 35°35'46", long 80°13'59", Davidson County, 0.3 mile downstream from High Rock Dam, 0.6 mile west of High Rock, 1.8 miles upstream from Lick Creek, and at mile 252.

DRAINAGE AREA.--4,000 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1947 to September 1948, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1947 to September 1948.

EXTREMES.--1947-48:
Dissolved solids: Maximum, 53 mg/l Nov. 11-20, 1947; minimum, 36 mg/l Apr. 1-10, 1948.
Hardness: Maximum, 21 mg/l July 1-10, 1948; minimum, 13 mg/l Oct. 1-10, 1947, Aug. 11-20, 1948.
Water temperatures: Maximum, 27.0°C July 20, 22, 23, 24, Aug. 2, 1948; minimum, 3.0°C Jan. 25, Feb. 1-7, 10, 12, 14, 1948.

REMARKS.--Miscellaneous chemical data published for water years 1944, 1955-62.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.									
01...	1510	13	0	4.7	1.7	8.3	2.3	28	0
01...A	1510	--	--	--	--	--	--	--	--
FEB.									
21...	1530	12	0	4.1	1.7	4.4	1.6	19	0
21...A	1530	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS (CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
NOV.									
01...	23	4.2	7.0	.1	.74	.000	60	59	.08
01...A	--	--	--	--	--	--	--	--	--
FEB.									
21...	16	5.3	4.6	.2	.09	.038	57	44	.08
21...A	--	--	--	--	--	--	--	--	--

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.								
01...	19	0	45	.8	82	6.4	--	--
01...A	--	--	--	--	--	6.9	17.0	21.0
FEB.								
21...	17	2	33	.5	61	6.2	--	--
21...A	--	--	--	--	--	7.0	6.0	10.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL MERCURY (HG) (UG/L)
NOV.							
01...	15	--	18	--	--	.06	<.5
01...A	--	7.3	--	900	20	--	--
FEB.							
21...	30	--	19	--	40	.04	<.5
21...A	--	11.1	--	--	--	--	--

02126000 ROCKY RIVER NEAR NORWOOD, N. C.

LOCATION.--Lat 35°08'50", long 80°10'26", Stanly County, at gaging station on left bank 1,000 ft downstream from Lanes Creek, 1.5 miles upstream from bridge on Secondary Road 1935, 6 miles southwest of Norwood, and 11.2 miles upstream from mouth.

DRAINAGE AREA.--1,370 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for water years 1945, 1948, 1955-56, 1958, 1960, 1964, 1966.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
01...	1620	126	8.8	0	8.8	5.6	105	8.5	162	0
01... A	1620	126	--	--	--	--	--	--	--	--
FEB.										
21...	1645	888	14	0	7.2	3.8	20	1.9	39	0
21... A	1645	888	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
NOV.									
01...	133	47	72	.1	1.1	.88	365	344	.50
01... A	--	--	--	--	--	--	--	--	--
FEB.									
21...	32	17	19	.4	.67	.15	105	105	.14
21... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.									
01...	124	45	0	80	6.6	570	7.1	--	--
01... A	--	--	--	--	--	--	8.0	19.0	21.0
FEB.									
21...	252	34	2	55	1.5	162	6.5	--	--
21... A	--	--	--	--	--	--	7.3	7.0	10.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL MERCURY (HG) (UG/L)
NOV.							
01...	50	--	21	--	--	.15	.5
01... A	--	8.2	--	1500	20	--	--
FEB.							
21...	15	--	20	--	10	.04	<.5
21... A	--	12.1	--	--	--	--	--

02127500 PEE DEE RIVER NEAR ANSONVILLE, N. C.

LOCATION.--Lat 35°05'07", long 79°59'57", Anson County, at bridge on State Highway 109, 1.0 mile downstream from Brown Creek, 6.0 miles east of Ansonville, and 212 miles upstream from mouth in Winyah Bay.

DRAINAGE AREA.--6,330 sq mi, approximately.

PERIOD OF RECORD.--Water years 1970-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
NOV.										
23...	1030	9.9	0	5.2	2.4	12	2.6	27	0	22
23... A	1030	--	--	--	--	--	--	--	--	21
JAN.										
19...	1515	11	0	4.9	2.1	7.1	2.0	20	0	16
19... A	1515	--	--	--	--	--	--	--	--	18
MAY										
18...	1515	10	--	4.4	1.5	4.0	1.9	16	0	13
18... A	1515	--	--	--	--	--	--	20	0	15

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NOV.									
23...	11	9.8	.2	--	.30	--	.020	77	55
23... A	--	--	--	--	--	--	--	--	--
JAN.									
19...	9.0	7.2	.0	--	.05	--	.044	61	54
19... A	--	--	--	--	--	--	--	--	--
MAY									
18...	5.6	2.9	.2	.3	--	.009	.030	49	39
18... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.									
23...	.10	23	1	50	1.1	100	6.4	--	--
23... A	--	--	--	--	--	118	5.3	11.0	5.0
JAN.									
19...	.08	21	4	40	.7	87	6.1	--	--
19... A	--	--	--	--	--	90	5.6	7.5	14.5
MAY									
18...	.07	18	5	30	.4	59	6.4	--	--
18... A	--	--	--	--	--	60	7.2	19.0	22.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
NOV.					
23...	25	--	17	.12	--
23... A	--	8.5	--	--	--
JAN.					
19...	10	--	25	.08	--
19... A	--	10.2	--	--	--
MAY					
18...	40	--	10	.11	50
18... A	--	6.9	2.0	--	--

02129000 PEE DEE RIVER NEAR ROCKINGHAM, N. C.

LOCATION.--Lat 34°56'46", long 79°52'11", Richmond County, at gaging station on left bank at bridge on U.S. Highway 74, 2.5 miles upstream from Falling Creek, 3.3 miles downstream from Blewett Falls hydroelectric plant, 6 miles west of Rockingham, and 192 miles upstream from mouth in Winyah Bay.

DRAINAGE AREA.--6,870 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: October 1946 to September 1948, October 1957 to September 1967, water years 1968-69, 1973 (discontinued, partial-record station), October 1969 to September 1972.
Water temperatures.--October 1946 to September 1948, October 1957 to September 1967.

EXTREMES.--1946-48, 1957-67:
Dissolved solids: Maximum, 84 mg/l Jan. 1-31, 1966; minimum, 38 mg/l Mar. 1-10, 1948.
Hardness: Maximum, 27 mg/l Mar. 1-14, 1963; minimum, 11 mg/l Feb. 1-10, 1958.
Specific conductance (1957-67): Maximum daily, 152 micromhos Nov. 17, 1959; minimum daily, 41 micromhos Mar. 17, 1964.
Water temperatures: Maximum, 29.5°C Sept. 1, 2, 1962; minimum, freezing point on many days in 1961-62.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1955-56.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.												
18... A	1200	7690	--	--	--	--	--	--	--	--	--	--
NOV.												
23...	1220	9200	12	--	0	--	5.1	3.3	12	2.9	33	0
23... A	1220	9200	--	--	--	--	--	--	--	--	--	--
JAN.												
19...	1145	10700	9.0	--	0	--	5.0	2.2	6.5	1.9	19	0
19... A	1145	10700	--	--	--	--	--	--	--	--	--	--
MAR.												
16... A	0945	14800	--	--	--	--	--	--	--	--	--	--
APR.												
19... A	1200	9200	--	--	--	--	--	--	--	--	--	--
MAY												
18...	1230	--	10	--	--	--	4.7	1.9	6.4	1.9	--	--
18... A	1230	--	--	--	--	--	--	--	--	--	22	0
JUNE												
28... A	0900	9110	--	--	--	--	--	--	--	--	--	--
SEP.												
05...	1240	6850	11	2500	70	100	4.1	1.8	7.2	2.4	30	0
05... A	1240	6850	--	--	--	--	--	--	--	--	30	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.												
18... A	--	--	--	--	--	--	--	--	--	--	--	--
NOV.												
23...	27	8.8	11	.4	--	.47	--	--	--	--	.000	73
23... A	--	--	--	--	--	--	--	--	--	--	--	--
JAN.												
19...	16	9.4	7.6	.0	--	.50	--	--	--	--	.047	63
19... A	16	--	--	--	--	--	--	--	--	--	--	--
MAR.												
16... A	16	--	--	--	--	--	--	--	--	--	--	--
APR.												
19... A	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
18...	--	8.0	--	.2	.3	--	.008	--	--	--	.030	56
18... A	18	6.4	4.5	--	--	--	--	--	--	--	--	--
JUNE												
28... A	--	--	--	--	--	--	--	--	--	--	--	--
SEP.												
05...	25	6.3	5.6	.2	--	--	--	.94	.41	6.0	.050	53
05... A	25	--	--	--	--	--	--	--	--	--	--	--

02129000 PEE DEE RIVER NEAR ROCKINGHAM, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.											
18... A	--	--	--	--	--	--	--	95	6.9	20.5	19.0
NOV.											
23...	73	.10	1810	26	0	47	1.0	110	6.6	--	--
23... A	--	--	--	--	--	--	--	110	5.3	11.0	10.0
JAN.											
19...	53	.09	1820	22	6	37	.6	85	6.3	--	--
19... A	--	--	--	--	--	--	--	90	5.7	7.0	13.0
MAR.											
16... A	--	--	--	--	--	--	--	75	6.9	14.0	20.5
APR.											
19... A	--	--	--	--	--	--	--	75	7.0	16.0	25.5
MAY											
18...	50	.08	--	20	--	39	.6	73	6.4	--	--
18... A	--	--	--	--	--	--	--	75	6.5	20.0	20.0
JUNE											
28... A	--	--	--	--	--	--	--	75	6.3	24.5	24.5
SEP.											
05...	54	.07	548	18	0	43	.7	78	7.1	--	--
05... A	--	--	--	--	--	--	--	70	6.2	28.5	32.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)
OCT.										
18... A	--	--	6.0	--	1	--	--	--	--	--
NOV.										
23...	10	--	--	13	--	--	--	.04	--	--
23... A	--	--	9.9	--	40	--	--	--	--	--
JAN.										
19...	5	--	--	15	--	--	--	.09	--	--
19... A	--	--	11.4	--	120	--	--	--	--	--
MAR.										
16... A	--	--	10.1	--	108	--	--	--	--	--
APR.										
19... A	--	--	9.4	--	16	--	--	--	--	--
MAY										
18...	40	--	--	--	--	--	--	.16	--	--
18... A	--	--	8.8	11	4	--	--	--	--	--
JUNE										
28... A	--	--	4.3	--	104	--	--	--	--	--
SEP.										
05...	--	10	--	3.8	--	4.5	4.0	--	2	0
05... A	--	--	5.9	30	--	--	--	--	--	--

DATE	DIS-SOLVED CAD-MIUM (CD) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED SELE-NIUM (SE) (UG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT.										
18... A	--	--	--	--	--	--	--	--	--	--
NOV.										
23...	--	--	--	--	--	--	--	--	--	--
23... A	--	--	--	--	--	--	--	--	--	--
JAN.										
19...	--	--	--	--	--	--	--	--	--	--
19... A	--	--	--	--	--	--	--	--	--	--
MAR.										
16... A	--	--	--	--	--	--	--	--	--	--
APR.										
19... A	--	--	--	--	--	--	--	--	--	--
MAY										
18...	--	--	--	--	--	--	--	--	40	--
18... A	--	--	--	--	--	--	--	--	--	--
JUNE										
28... A	--	--	--	--	--	--	--	--	--	--
SEP.										
05...	1	0	0	6	8	.0	.0	4	--	10
05... A	--	--	--	--	--	--	--	--	--	--

02129000 PEE DEE RIVER NEAR ROCKINGHAM, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	TOTAL IRON IN BOTTOM DE-POSITS (UG/G)	TOTAL MANGA-NESE IN BOTTOM DE-POSITS (UG/G)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)
SEP. 05...	1900	120	.9	24	2.8	0	0	3	0	10

	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)
SEP. 05...	5	.04	12	5.0

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
SEP. 05...	1240	6850	14	259

PEE DEE RIVER BASIN

02134138 LUMBER RIVER AT WATER INTAKE, AT LUMBERTON, N. C.

LOCATION.--Lat 34°37'58", long 79°01'40", Robeson County, 0.5 mile downstream from Raft Swamp, and 2 mile northwest of Lumberton.

DRAINAGE AREA.--674 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
13...	1400	1150	6.0	116	1.3	.7	4.1	.9	5	0
13... A	1400	1150	--	--	--	--	--	--	--	--
JAN.										
25...	1450	2200	1.9	0	1.7	.9	3.2	.8	2	0
25... A	1450	2200	--	--	--	--	--	--	--	--
MAY										
17...	1430	916	3.0	--	1.8	.7	3.0	.7	2	0
17... A	1430	916	--	--	--	--	--	--	5	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
13...	4	4.6	5.0	.5	--	.10	--	.010	33	26
13... A	5	--	--	--	--	--	--	--	--	--
JAN.										
25...	2	6.2	6.4	.1	--	.20	--	.000	28	23
25... A	1	--	--	--	--	--	--	--	--	--
MAY										
17...	2	3.2	4.1	.2	.3	--	.007	.030	48	19
17... A	4	--	--	--	--	--	--	--	--	--

02134138 LUMBER RIVER AT WATER INTAKE, AT LUMBERTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
13...	.04	102	6	2	55	.7	36	5.7	--	--
13... A	--	--	--	--	--	--	<50	5.9	11.5	15.5
JAN.										
25...	.04	166	7	6	44	.5	44	5.0	--	--
25... A	--	--	--	--	--	--	36	5.7	9.0	14.0
MAY										
17...	.07	119	7	5	44	.5	36	5.5	--	--
17... A	--	--	--	--	--	--	29	6.6	20.0	28.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
13...	70	--	16	.06	--
13...A	--	9.3	--	--	--
JAN.					
25...	50	--	32	.03	--
25...A	--	11.8	--	--	--
MAY					
17...	100	--	8.0	.15	80
17...A	--	8.8	2.0	--	--

PEE DEE RIVER BASIN

02134500 LUMBER RIVER AT BOARDMAN, N. C.

LOCATION.--Lat 34°26'32", long 78°57'38", Robeson County, at gaging station on right bank 50 ft downstream from bridge on U.S. Highway 74, 1 mile downstream from Seaboard Coast Line Railroad bridge at Boardman, 1.5 miles downstream from Big Swamp, and 40.5 miles upstream from mouth.

DRAINAGE AREA.--1,220 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1946 to September 1947, October 1956 to September 1957, water years 1968-69 (partial-record station), October 1969 to June 1973 (discontinued).
Water temperatures: October 1946 to September 1947.

EXTREMES.--1946-47:
Dissolved solids: Maximum, 59 mg/l Sept. 21-30, 1947, minimum, 28 mg/l Mar. 1-10, 1947.
Hardness: Maximum, 11 mg/l Nov. 21-30, 1946, Aug. 21-31, 1947; minimum, 6 mg/l on many days in 1947.
Water temperatures: Maximum, 28.0°C June 11, 1947; minimum, 2.0°C Feb. 11, 1947.

REMARKS.--Miscellaneous chemical data published for water years 1948-50, 1955-56, 1958-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
25... A	1130	412	--	--	--	--	--	--	--	--
NOV.										
30...	1515	1740	6.8	133	4.0	1.4	8.2	1.2	5	0
30... A	1515	1740	--	--	--	--	--	--	--	--
JAN.										
25... A	1330	3220	--	--	--	--	--	--	--	--
MAR.										
23...	1330	1160	7.1	72	1.9	.8	5.4	1.1	4	0
23... A	1330	1160	--	--	--	--	--	--	--	--
APR.										
17... A	1100	4600	--	--	--	--	--	--	--	--
MAY										
17...	1300	1030	4.0	--	2.0	.7	9.5	1.1	9	0
17... A	1300	1030	--	--	--	--	--	--	11	0
JUNE										
20... A	1630	1030	--	--	--	--	--	--	--	--

02134500 LUMBER RIVER AT BOARDMAN, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
OCT.										
25...A	--	--	--	--	--	--	--	--	--	--
NOV.										
30...	4	16	8.6	.2	--	.00	--	.020	77	48
30...A	2	--	--	--	--	--	--	--	--	--
JAN.										
25...A	--	--	--	--	--	--	--	--	--	--
MAR.										
23...	3	6.8	7.8	.4	--	.10	--	.000	48	34
23...A	1	--	--	--	--	--	--	--	--	--
APR.										
17...A	--	--	--	--	--	--	--	--	--	--
MAY										
17...	7	6.6	8.2	.2	.2	--	.007	.12	79	37
17...A	9	--	--	--	--	--	--	--	--	--
JUNE										
20...A	--	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
OCT.										
25...A	--	--	--	--	--	--	100	6.8	17.5	16.3
NOV.										
30...	.10	362	16	12	51	.9	71	5.2	--	--
30...A	--	--	--	--	--	--	80	5.8	8.0	10.0
JAN.										
25...A	--	--	--	--	--	--	60	5.5	8.5	16.0
MAR.										
23...	.07	150	8	5	55	.8	47	5.2	--	--
23...A	--	--	--	--	--	--	43	5.2	10.5	11.5
APR.										
17...A	--	--	--	--	--	--	39	5.5	15.0	24.0
MAY										
17...	.11	220	8	1	69	1.5	65	6.1	--	--
17...A	--	--	--	--	--	--	65	6.8	20.5	23.5
JUNE										
20...A	--	--	--	--	--	--	65	6.1	24.5	25.5

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DISSOLVED STRONTIUM (SR) (UG/L)
OCT.						
25...A	--	7.4	--	470	--	--
NOV.						
30...	80	--	50	--	.07	--
30...A	--	7.5	--	80	--	--
JAN.						
25...A	--	9.6	--	20	--	--
MAR.						
23...	140	--	40	--	.13	--
23...A	--	8.4	--	30	--	--
APR.						
17...A	--	7.0	--	70	--	--
MAY						
17...	140	--	11	--	.15	100
17...A	--	8.0	2.8	110	--	--
JUNE						
20...A	--	5.9	--	110	--	--

02138000 CATAWBA RIVER NEAR MARION, N. C.

LOCATION.--Lat 35°42'26", long 82°02'00", McDowell County, at gaging station on right bank 15 ft downstream from bridge on U.S. Highway 221, 0.2 mile downstream from Tom Creek, 2.2 miles northwest of Marion, and at mile 294.

DRAINAGE AREA.--171 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1945 to September 1946, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1945 to September 1946.

EXTREMES.--1945-46:
Dissolved solids: Maximum, 36 mg/l Sept. 11-20, 1946; minimum, 25 mg/l Jan. 1-10, 1946.
Hardness: Maximum, 12 mg/l Aug. 1-10, 1946; minimum, 8 mg/l Jan. 1-10, Mar. 11-20, 21-31, May 11-20, 1946.
Water temperatures: Maximum, 26.0°C July 11, 14, 1946; minimum, freezing point Dec. 18, 1945.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1948-49, 1955-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
29...	1140	262	7.0	0	3.2	1.0	5.9	1.5	17	0
29... A	1140	262	--	--	--	--	--	--	--	--
FEB.										
26...	0900	324	11	[illegible]	2.4	.7	3.2	.6	12	0
26... A	0900	324	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
NOV.									
29...	14	4.4	6.8	.3	.13	.000	50	38	.07
29...A	13	--	--	--	--	--	--	--	--
FEB.									
26...	10	2.2	3.8	.0	.27	.000	35	31	.05
26...A	14	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.									
29...	35.4	12	0	48	.7	58	6.1	--	--
29...A	--	--	--	--	--	--	6.9	7.0	6.0
FEB.									
26...	30.6	9	0	42	.5	44	6.3	--	--
26...A	--	--	--	--	--	--	6.7	7.0	--

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
NOV.					
29...	5	--	22	--	.04
29...A	--	12.7	--	30	--
FEB.					
26...	10	--	9.6	--	.02
26...A	--	11.0	--	--	--

02139282 CATAWBA RIVER AT MORGANTON, N. C.

LOCATION.--Lat 35°44'58", long 81°42'20", Burke County, at bridge on State Highway 181, 0.8 mile downstream from Silver Creek, and 1 mile northwest of Morganton.

DRAINAGE AREA.--593 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for 1963 water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
19...	1435	1420	8.8	0	2.8	1.1	8.1	1.0	17	0
19...A	1435	1420	--	--	--	--	--	--	--	--
MAR.										
13...	1230	3141	11	0	3.2	1.2	5.2	1.0	13	0
13...A	1230	3141	--	--	--	--	--	--	--	--
MAY										
15...	1300	3100	8.0	--	2.3	.9	6.4	1.6	12	0
15...A	1300	3100	--	--	--	--	--	--	28	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
19...	14	3.4	8.2	.0	--	.07	--	.000	41	42
19...A	15	--	--	--	--	--	--	--	--	--
MAR.										
13...	11	4.0	6.4	.1	--	.00	--	.000	46	38
13...A	13	--	--	--	--	--	--	--	--	--
MAY										
15...	10	4.2	5.1	.1	.2	--	.006	.020	35	35
15...A	23	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
19...	.06	157	12	0	58	1.0	62	6.0	--	--
19...A	--	--	--	--	--	--	70	6.3	8.0	13.5
MAR.										
13...	.06	390	13	3	44	.6	54	6.1	--	--
13...A	--	--	--	--	--	--	57	6.4	12.5	22.5
MAY										
15...	.05	293	9	0	55	.9	54	6.4	--	--
15...A	--	--	--	--	--	--	56	6.3	13.5	18.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
19...	5	--	27	.07	--
19...A	--	9.8	--	--	--
MAR.					
13...	120	--	17	.01	--
13...A	--	9.9	--	--	--
MAY					
15...	10	--	7.6	.08	60
15...A	--	8.8	22	--	--

02141500 CATAWBA RIVER AT RHODHISS, N. C.

LOCATION.--Lat 35°46'22", long 81°26'14", Caldwell County, at bridge on Rhodhiss Road at Rhodhiss, 0.2 mile downstream from Rhodhiss Dam, and 242 miles upstream from mouth of Wateree River.

DRAINAGE AREA.--1,090 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
19... B	1145	--	9.0	0	3.0	1.1	6.6	1.0	17	0
19... A	1145	--	--	--	--	--	--	--	--	--
19... C	1245	--	9.0	0	3.0	1.6	6.3	1.4	17	0
19... A	1245	--	--	--	--	--	--	--	--	--
19... D	1315	--	10	0	3.0	1.1	6.4	1.0	17	0
19... A	1315	--	--	--	--	--	--	--	--	--
MAR.										
15... B	1130	6240	9.3	0	2.5	1.0	4.5	.9	14	--
15... A	1130	6240	--	--	--	--	--	--	--	--
15... C	1215	6240	9.9	0	2.5	1.0	4.4	1.0	15	0
15... A	1215	6240	--	--	--	--	--	--	--	--
15... D	1240	6240	11	0	2.5	1.0	4.4	.9	14	0
15... A	1240	6240	--	--	--	--	--	--	--	--
MAY										
15... B	0820	6240	10	--	2.3	.9	4.8	1.3	14	0
15... A	0820	6240	--	--	--	--	--	--	--	--
15... C	0945	6240	--	--	2.3	.9	4.8	1.4	12	0
15... A	0945	6240	--	--	--	--	--	--	--	--
15... D	1030	6240	10	--	2.4	.9	4.8	1.3	12	0
15... A	1030	6240	--	--	--	--	--	--	--	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
19... B	14	5.4	6.7	.0	--	.00	--	.000	44	41
19... A	14	--	--	--	--	--	--	--	--	--
19... C	14	3.4	6.3	.0	--	.30	--	.000	41	41
19... A	15	--	--	--	--	--	--	--	--	--
19... D	14	5.4	7.2	.0	--	.00	--	.000	45	44
19... A	16	--	--	--	--	--	--	--	--	--
MAR.										
15... B	11	2.4	5.7	.1	--	.00	--	.000	37	34
15... A	12	--	--	--	--	--	--	--	--	--
15... C	12	2.0	5.2	.1	--	.00	--	.000	26	28
15... A	12	--	--	--	--	--	--	--	--	--
15... D	11	2.4	5.8	.1	--	.20	--	.000	41	36
15... A	12	--	--	--	--	--	--	--	--	--
MAY										
15... B	11	3.7	4.0	.1	.2	--	.006	.020	43	36
15... A	--	--	--	--	--	--	--	--	--	--
15... C	10	3.9	3.8	.1	.2	--	.006	.020	37	33
15... A	--	--	--	--	--	--	--	--	--	--
15... D	10	3.0	3.3	.1	.2	--	.006	.020	34	32
15... A	--	--	--	--	--	--	--	--	--	--

A Field analysis.
B Sample collected at quarter-point nearest left bank.
C Sample collected at midpoint of stream.
D Sample collected at quarter-point nearest right bank.

02141500 CATAWBA RIVER AT RHODHISS, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
19... B	.06	--	12	0	52	.8	60	5.9	--	--
19... A	--	--	--	--	--	--	65	6.1	10.0	11.0
19... C	.06	--	14	0	46	.7	58	6.5	--	--
19... A	--	--	--	--	--	--	67	7.1	10.0	11.0
19... D	.06	--	12	0	55	1.1	60	5.9	--	--
19... A	--	--	--	--	--	--	63	6.7	10.0	11.0
MAR.										
15... B	.05	623	11	0	45	.6	49	5.7	--	--
15... A	--	--	--	--	--	--	56	5.9	13.5	19.5
15... C	.04	438	10	0	45	.6	49	6.1	--	--
15... A	--	--	--	--	--	--	54	6.0	13.0	17.0
15... D	.06	691	11	0	45	.6	49	5.7	--	--
15... A	--	--	--	--	--	--	50	6.4	13.0	16.5
MAY										
15... B	.06	724	11	0	45	.6	49	6.3	--	--
15... A	--	--	--	--	--	--	<40	6.6	15.5	14.5
15... C	.05	623	11	1	46	.6	49	6.2	--	--
15... A	--	--	--	--	--	--	50	6.7	15.5	16.0
15... D	.05	573	9	0	48	.7	49	6.5	--	--
15... A	--	--	--	--	--	--	48	6.9	15.5	16.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.						
19... B	5	--	--	34	.09	--
19... A	--	--	8.5	--	--	--
19... C	8	--	--	8.6	.12	--
19... A	--	--	8.5	--	--	--
19... D	5	--	--	34	.06	--
19... A	--	--	8.5	--	--	--
MAR.						
15... B	3	--	--	45	.07	--
15... A	--	--	9.3	--	--	--
15... C	5	--	--	19	.10	--
15... A	--	--	9.4	--	--	--
15... D	5	--	--	45	.08	--
15... A	--	--	9.5	--	--	--
MAY						
15... B	15	--	--	11	.06	60
15... A	--	--	7.7	--	--	--
15... C	15	9	--	12	.13	60
15... A	--	--	7.6	--	--	--
15... D	15	--	--	6.1	.11	60
15... A	--	--	7.5	--	--	--

A Field analysis.
B Sample collected at quarter-point nearest left bank.
C Sample collected at midpoint of stream.
D Sample collected at quarter-point nearest right bank.

02142500 CATAWBA RIVER AT CATAWBA, N. C.

LOCATION.--Lat 35°43'00", long 81°03'59", Catawba County, at bridge on U.S. Highway 70, 0.5 mile upstream from Lyle Creek, and 1.0 mile northeast of Catawba.

DRAINAGE AREA.--1,535 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1945 to September 1946, October 1954 to September 1955, water years 1971-73 (discontinued, partial-record station).
Water temperatures: October 1945 to September 1946, October 1954 to September 1955.

EXTREMES.--1945-46, 1954-55:
Dissolved solids: Maximum, 47 mg/l Feb. 20-28, 1955; minimum, 26 mg/l Oct. 11-20, 1945, Jan. 21-31, Mar. 1-10, 11-20, 1946.
Hardness: Maximum, 17 mg/l July 21-31, 1946; minimum, 9 mg/l Oct. 11-20, 1945, Mar. 1-10, 11-20, 1946, May 1-10, 1955.
Specific conductance (1954-55): Maximum daily, 156 micromhos Feb. 11, 1955; minimum daily, 38.5 micromhos June 17, 1955.
Water temperatures: Maximum, 27.0°C July 18, 1955; minimum, 3.0°C Feb. 13, 1955.

REMARKS.--Miscellaneous chemical data published for water years 1948, 1956-63.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.									
10...	1430	9.1	0	3.0	1.0	5.4	1.2	18	0
10... A	1430	--	--	--	--	--	--	--	--
NOV.									
29...	1345	10	0	3.6	.8	8.6	1.0	18	0
29... A	1345	--	--	--	--	--	--	--	--
FEB.									
20...	1330	9.1	0	2.4	.9	3.2	1.3	10	0
20... A	1330	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.									
10...	15	2.2	5.6	.0	.30	.000	38	38	.05
10... A	--	--	--	--	--	--	--	--	--
NOV.									
29...	15	3.6	11	.0	.00	.11	55	48	.07
29... A	13	--	--	--	--	--	--	--	--
FEB.									
20...	8	4.0	3.2	.0	.40	.000	34	30	.05
20... A	--	--	--	--	--	--	--	--	--

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.								
10...	12	0	47	.7	54	6.3	--	--
10... A	--	--	--	--	--	--	20.0	--
NOV.								
29...	13	0	58	1.1	66	6.3	--	--
29... A	--	--	--	--	--	6.8	11.0	5.0
FEB.								
20...	10	2	38	.4	43	6.2	--	--
20... A	--	--	--	--	--	6.7	6.0	--

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT.					
10...	10	--	14	--	.05
10... A	--	7.0	--	20	--
NOV.					
29...	5	--	14	--	.04
29... A	--	9.6	--	30	--
FEB.					
20...	40	--	10	<10	.00
20... A	--	10.5	--	--	--

02142808 CATAWBA RIVER AT STATE HIGHWAY 27, AT MOUNT HOLLY, N. C.

LOCATION.--Lat 35°17'46", long 81°00'18", Gaston County, at bridge on State Highway 27, at Mount Holly, and 0.3 mile downstream from Dutchmans Creek.

DRAINAGE AREA.--2,010 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1971-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OV.									
01...	1030	6.8	0	3.5	1.2	4.6	1.3	18	0
01... A	1030	--	--	--	--	--	--	--	--
FEB.									
21...	1015	17	0	5.2	2.0	4.4	1.2	28	0
21... A	1015	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OV.									
01...	15	3.0	5.0	.0	.00	.000	36	34	.05
01...A	--	--	--	--	--	--	--	--	--
FEB.									
21...	23	4.2	3.8	.1	.00	.000	57	52	.08
21...A	28	--	--	--	--	--	--	--	--

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OV.								
01...	14	0	34	.5	54	6.4	--	--
01... A	--	--	--	--	--	6.9	19.0	18.5
FEB.								
21...	21	0	30	.4	65	6.5	--	--
21... A	--	--	--	--	--	6.9	6.5	10.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL MERCURY (HG) (UG/L)
NOV.					
01...	20	--	11	.06	.5
01... A	--	7.4	--	--	--
FEB.					
21...	15	--	14	.05	<.5
21... A	--	11.6	--	--	--

02143084 SOUTH FORK CATAWBA RIVER NEAR LINCOLNTON, N. C.

LOCATION.--Lat 35°29'00", long 81°16'50", Lincoln County, at bridge on Secondary Road 1008, 0.2 mile upstream from Clark Creek, and 1.5 miles northwest of Lincolnton.

DRAINAGE AREA.--260 sq mi, approximately.

PERIOD OF RECORD.--Water years 1970-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
19...	1635	225	9.3	0	2.9	1.4	6.8	1.3	15	0
19...A	1635	225	--	--	--	--	--	--	--	--
MAR.										
13...	0830	1511	5.1	0	3.0	1.2	3.9	1.4	10	0
13...A	0830	1511	--	--	--	--	--	--	--	--
MAY										
16...	1420	127	12	--	3.3	1.4	7.3	1.6	16	0
16...A	1420	127	--	--	--	--	--	--	18	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
19...	12	5.0	6.4	.0	--	.50	--	.000	43	43
19...A	--	--	--	--	--	--	--	--	--	--
MAR.										
13...	8	4.6	4.6	.1	--	.47	--	.000	54	34
13...A	11	--	--	--	--	--	--	--	--	--
MAY										
16...	13	4.0	9.5	.2	.4	--	.006	.070	47	49
16...A	15	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
19...	.06	26.1	13	1	50	.8	58	6.1	--	--
19...A	--	--	--	--	--	--	67	--	5.0	14.0
MAR.										
13...	.07	220	13	5	37	.5	44	5.8	--	--
13...A	--	--	--	--	--	--	40	7.0	12.5	10.0
MAY										
16...	.06	16.1	14	1	50	.8	66	6.4	--	--
16...A	--	--	--	--	--	--	65	5.9	18.0	23.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
19...	5	--	19	.00	--
19...A	--	11.1	--	--	--
MAR.					
13...	30	--	25	.00	--
13...A	--	9.3	--	--	--
MAY					
16...	20	--	10	.07	60
16...A	--	8.1	36	--	--

02143500 INDIAN CREEK NEAR LABORATORY, N. C.

LOCATION.--Lat 35°25'20", long 81°15'52", Lincoln County, temperature recorder at gaging station on left bank 250 ft upstream from remains of Rudisill Mill dam, 0.5 mile upstream from bridge on Secondary Road 1252, 1.5 miles upstream from mouth, 1.5 miles south of Laboratory, and 3.5 miles south of Lincolnton.

DRAINAGE AREA.--68.4 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1952.
Water temperatures: January 1953 to April 1973 (discontinued).

EXTREMES.--October 1972 to April 1973:
Water temperatures: Maximum, 17.0°C Oct. 1, Nov. 3, 4; minimum, 3.0°C on several days in January.

Period of record:
Water temperatures: Maximum, 29.0°C Aug. 1, 2, 5, 1953; minimum, freezing point on several days in 1962 and 1966.

REMARKS.--Miscellaneous chemical data published for water years 1955-58, 1960-67.

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO APRIL 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	16.0	13.0	13.0	7.0	7.0	11.5	9.5	5.5	4.5	8.0	7.0
2	16.0	14.0	15.0	13.0	7.0	6.0	11.5	10.5	6.5	5.5	8.0	7.0
3	14.5	14.0	17.0	15.0	6.5	6.0	10.5	8.0	7.0	6.5	9.5	8.0
4	15.0	14.0	17.0	16.0	8.0	6.5	8.0	7.0	7.0	6.0	11.0	9.5
5	16.0	15.0	16.0	14.0	10.5	8.0	8.0	7.0	7.0	6.5	11.5	11.0
6	16.0	16.0	14.0	11.5	12.0	10.5	8.5	8.0	7.0	7.0	11.5	11.5
7	16.5	16.0	11.5	11.5	12.0	10.5	8.5	5.0	7.0	7.0	11.5	10.5
8	16.0	15.0	11.5	11.5	10.5	9.0	5.0	3.0	7.0	7.0	11.0	10.5
9	15.0	15.0	11.5	10.5	10.5	9.0	3.0	3.0	7.0	6.0	11.5	11.0
10	15.0	14.5	11.0	10.5	13.0	10.5	3.0	3.0	6.0	4.5	13.0	11.5
11	14.5	13.0	11.5	11.0	13.0	12.0	3.0	3.0	4.5	4.0	13.0	12.0
12	13.0	13.0	11.5	11.5	12.0	9.0	3.0	3.0	4.0	4.0	14.0	11.5
13	15.0	13.0	11.5	11.5	9.5	9.0	3.0	3.0	4.5	4.0	14.0	11.5
14	16.0	15.0	13.0	11.5	10.0	9.5	3.0	3.0	5.0	4.5	14.0	12.0
15	16.0	16.0	13.0	10.5	9.5	7.0	4.0	3.0	6.5	5.0	15.0	14.0
16	16.0	15.0	10.5	9.5	7.0	6.5	4.0	4.0	6.5	5.5	15.0	14.5
17	16.5	15.0	9.5	9.5	6.0	5.0	4.0	4.0	5.5	4.0	15.0	13.0
18	16.5	15.5	9.0	8.5	5.0	4.0	5.5	4.0	4.0	4.0	13.0	9.5
19	15.5	13.0	9.0	9.0	4.5	4.0	8.5	5.5	4.0	4.0	10.5	9.5
20	14.0	10.5	9.0	9.0	7.0	4.5	8.5	7.0	4.5	4.0	10.0	9.5
21	10.5	9.5	9.0	8.5	9.0	7.0	7.0	6.5	5.0	4.5	10.5	9.5
22	10.0	9.5	8.5	8.0	9.5	9.0	7.0	6.0	5.5	5.0	9.5	9.5
23	12.0	10.0	8.0	7.0	10.0	9.5	7.0	7.0	5.5	5.0	9.5	8.5
24	14.5	12.0	7.0	5.5	10.0	10.0	7.0	6.5	6.5	5.5	10.5	9.5
25	14.5	14.0	5.5	5.0	10.0	10.0	6.5	6.0	7.0	6.0	10.5	10.5
26	14.0	13.0	6.5	5.5	10.0	9.5	6.0	6.0	8.5	7.0	11.0	10.5
27	13.0	12.0	6.5	6.5	9.5	7.0	8.0	6.0	8.5	8.5	11.5	11.0
28	12.0	12.0	7.0	6.5	7.0	6.0	8.0	7.0	8.5	7.0	12.0	11.5
29	14.0	12.0	7.0	7.0	6.5	6.5	7.0	6.0	---	---	12.0	11.0
30	14.0	13.0	7.0	7.0	8.5	6.5	6.0	5.0	---	---	11.0	10.5
31	13.0	13.0	---	---	9.5	8.5	5.0	4.0	---	---	12.0	11.0
MONTH	17.0	9.5	17.0	5.0	13.0	4.0	11.5	3.0	8.5	4.0	15.0	7.0

	APRIL	
DAY	MAX	MIN
1	15.0	12.0
2	15.0	12.0
3	13.0	12.0
4	14.0	13.0
5	14.0	11.5

02145442 SOUTH FORK CATAWBA RIVER NEAR ELMORES CROSSROADS, N. C.

LOCATION.--Lat 35°10'00", long 81°02'18", Gaston County, water-quality recorder at Lower Armstrong Bridge on Secondary Road 2524, 1.0 mile above mouth, and 5.2 miles southeast of Elmores Crossroads.

DRAINAGE AREA.--660 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1971 (partial-record station), January 1972 to June 197 (discontinued).
Water temperatures: November 1969 to June 1973 (discontinued).

EXTREMES.--October 1972 to June 1973:
Specific conductance: Maximum recorded, 200 micromhos on many days during March, April, May and June; minimum recorded, 30 micromhos Feb. 4, 5.
Water temperatures: Maximum recorded, 33.0°C June 18; minimum recorded, 8.0°C Dec. 18, 19.

Period of record:
Specific conductance (1971-73): Maximum recorded, 200 micromhos on many days during March, April, May and June 1973; minimum recorded, 30 micromhos Feb. 4, 5, 1973.
Water temperatures: Maximum recorded, 37.0°C Aug. 3, 1970; minimum recorded, 6.0°C Feb. 9, 11, 1971.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
NOV.										
20...	0953	8.3	0	3.7	1.4	7.4	2.0	18	0	15
20...A	0953	--	--	--	--	--	--	--	--	--
MAR.										
14...	1030	10	0	3.5	1.5	4.8	1.7	16	0	13
14...A	1030	--	--	--	--	--	--	--	--	--
MAY										
17...	1545	11	--	4.0	1.4	8.5	1.7	15	0	12
17...A	1545	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NOV.									
20...	7.8	8.0	.2	--	.20	--	.000	51	49
20...A	--	--	--	--	--	--	--	--	--
MAR.									
14...	5.8	6.0	.2	--	.10	--	.000	50	43
14...A	--	--	--	--	--	--	--	--	--
MAY									
17...	7.0	9.5	.2	.3	--	.005	.030	55	51
17...A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.									
20...	.07	15	0	48	.8	72	6.6	--	--
20...A	--	--	--	--	--	80	6.9	18.8	9.0
MAR.									
14...	.07	16	3	38	.5	62	5.8	--	--
14...A	--	--	--	--	--	--	6.3	19.0	19.0
MAY									
17...	.07	16	3	51	.9	76	6.4	--	--
17...A	--	--	--	--	--	69	6.2	23.0	18.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
NOV.					
20...	10	--	7.2	.10	--
20...A	--	7.5	--	--	--
MAR.					
14...	40	--	41	.09	--
14...A	--	8.4	--	--	--
MAY					
17...	10	--	9.6	.12	40
17...A	--	8.0	--	--	--

02145442 SOUTH FORK CATAWBA RIVER NEAR ELMORES CROSSROADS, N. C.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), OCTOBER 1972 TO JUNE 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	100	90	110	100	---	---	70	70	70	60	---	---
2	100	90	110	100	---	---	70	60	80	60	---	---
3	100	90	100	100	---	---	70	70	50	40	---	---
4	100	90	100	90	---	---	70	70	40	30	---	---
5	100	90	110	100	---	---	70	70	40	30	---	---
6	90	90	110	100	---	---	70	70	50	40	---	---
7	90	90	100	100	---	---	80	70	50	50	---	---
8	90	90	---	---	---	---	80	70	60	50	---	---
9	100	90	---	---	---	---	70	70	60	50	---	---
10	100	90	---	---	---	---	70	60	60	50	---	---
11	100	90	---	---	---	---	70	60	70	60	---	---
12	100	90	---	---	---	---	70	60	70	70	---	---
13	90	90	---	---	---	---	70	70	70	60	---	---
14	90	90	---	---	110	80	70	70	70	60	---	---
15	100	90	---	---	90	80	70	70	70	70	---	---
16	100	90	---	---	90	50	70	70	70	70	200	200
17	110	100	---	---	50	50	80	70	70	70	200	200
18	100	100	---	---	50	40	80	70	70	70	200	200
19	110	100	---	---	50	50	80	70	70	70	200	200
20	100	100	---	---	50	50	70	70	70	70	200	200
21	100	90	---	---	60	50	70	70	70	70	200	200
22	100	90	---	---	80	60	80	80	70	60	200	200
23	100	90	---	---	70	60	90	70	70	60	200	200
24	110	90	---	---	70	60	80	70	70	70	200	200
25	100	100	---	---	60	60	70	60	70	60	200	200
26	100	100	---	---	60	50	70	60	70	70	200	200
27	110	100	---	---	70	50	70	70	70	70	200	200
28	100	100	---	---	70	60	70	70	70	70	---	---
29	110	100	---	---	70	60	70	60	---	---	---	---
30	110	100	---	---	70	60	70	60	---	---	---	---
31	110	100	---	---	70	70	70	60	---	---	---	---
MONTH	110	90	---	---	---	---	90	60	80	30	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	200	200	200	200	200	200	---	---	---	---	---	---
2	200	200	200	200	200	200	---	---	---	---	---	---
3	200	200	200	200	200	200	---	---	---	---	---	---
4	200	200	200	200	200	200	---	---	---	---	---	---
5	200	200	200	200	200	200	---	---	---	---	---	---
6	200	200	200	200	200	200	---	---	---	---	---	---
7	200	200	200	200	200	200	---	---	---	---	---	---
8	200	200	200	200	200	200	---	---	---	---	---	---
9	200	200	200	200	200	200	---	---	---	---	---	---
10	200	200	200	200	200	200	---	---	---	---	---	---
11	200	200	200	200	200	200	---	---	---	---	---	---
12	200	200	200	200	200	200	---	---	---	---	---	---
13	200	200	200	200	200	200	---	---	---	---	---	---
14	200	200	200	200	200	200	---	---	---	---	---	---
15	200	200	200	200	200	200	---	---	---	---	---	---
16	200	200	200	200	200	200	---	---	---	---	---	---
17	200	200	200	200	200	200	---	---	---	---	---	---
18	200	200	200	200	200	200	---	---	---	---	---	---
19	200	200	200	200	200	200	---	---	---	---	---	---
20	200	200	200	200	200	200	---	---	---	---	---	---
21	200	200	200	200	200	200	---	---	---	---	---	---
22	200	200	200	200	200	200	---	---	---	---	---	---
23	200	200	200	200	200	200	---	---	---	---	---	---
24	200	200	200	200	200	200	---	---	---	---	---	---
25	200	200	200	200	200	200	---	---	---	---	---	---
26	200	200	200	200	---	---	---	---	---	---	---	---
27	200	200	200	200	---	---	---	---	---	---	---	---
28	200	200	200	200	---	---	---	---	---	---	---	---
29	200	200	200	200	---	---	---	---	---	---	---	---
30	200	200	200	200	---	---	---	---	---	---	---	---
31	---	---	200	200	---	---	---	---	---	---	---	---
MONTH	200	200	200	200	200	200	---	---	---	---	---	---
YEAR	200	30										

02145442 SOUTH FORK CATAWBA RIVER NEAR ELMORES CROSSROADS, N. C.--Continued

TEMPERATURE (°C) OF WATER, OCTOBER 1972 TO JUNE 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	28.5	27.0	24.5	23.0	---	---	15.5	14.0	14.0	13.5	---	---
2	27.0	26.0	24.0	21.0	---	---	15.0	14.5	14.0	9.5	---	---
3	27.0	26.5	24.5	23.5	---	---	15.0	14.5	10.0	9.0	---	---
4	27.0	26.5	25.5	25.5	---	---	16.0	15.0	10.0	8.5	---	---
5	28.0	26.0	24.5	23.5	---	---	18.0	16.5	14.5	9.0	---	---
6	27.0	26.5	23.5	23.0	---	---	18.0	16.0	14.0	11.0	---	---
7	27.0	26.0	23.5	23.0	---	---	16.0	13.5	15.0	13.0	---	---
8	26.0	25.5	---	---	---	---	13.5	12.0	14.5	12.0	---	---
9	26.5	25.0	---	---	---	---	14.5	12.0	14.0	12.0	---	---
10	26.0	24.5	---	---	---	---	14.0	13.5	12.0	11.0	---	---
11	26.0	25.0	---	---	---	---	14.0	13.0	11.5	11.0	---	---
12	26.5	25.5	---	---	---	---	13.5	10.5	12.5	10.5	---	---
13	26.5	25.5	---	---	---	---	12.0	11.0	13.5	11.0	---	---
14	28.0	25.5	---	---	19.0	17.0	12.0	10.0	13.5	11.0	---	---
15	26.5	25.5	---	---	17.0	13.5	13.0	11.0	14.0	12.5	---	---
16	25.5	24.0	---	---	14.5	9.0	13.0	11.0	13.0	10.5	20.0	19.0
17	26.5	24.0	---	---	10.5	8.5	13.5	12.0	11.0	10.5	19.5	15.0
18	26.0	25.0	---	---	12.0	8.0	14.5	13.5	12.0	10.5	15.0	14.0
19	25.5	23.5	---	---	12.0	8.0	14.5	13.5	14.0	12.0	15.0	13.0
20	23.5	22.0	---	---	14.0	10.5	15.0	14.0	13.5	11.5	16.0	13.5
21	23.5	22.0	---	---	14.5	13.5	14.5	14.0	14.0	13.0	16.0	14.0
22	23.0	21.0	---	---	14.5	10.5	15.0	12.0	14.0	13.0	15.5	14.0
23	23.5	21.5	---	---	13.5	11.5	14.0	10.5	15.0	13.5	16.5	15.0
24	23.5	22.0	---	---	13.5	11.0	14.0	13.0	15.0	14.0	18.0	16.0
25	24.0	23.0	---	---	14.0	13.0	14.0	12.0	14.5	13.5	18.0	15.0
26	23.5	23.5	---	---	14.0	12.0	14.0	13.0	15.0	14.0	18.5	14.5
27	23.5	23.0	---	---	14.5	13.0	15.0	13.5	15.0	14.0	18.5	18.0
28	23.5	23.0	---	---	16.0	13.5	14.0	11.5	14.0	14.0	---	---
29	23.5	22.0	---	---	15.0	14.5	13.0	11.5	---	---	---	---
30	23.5	22.0	---	---	15.0	14.5	12.0	9.5	---	---	---	---
31	23.5	23.0	---	---	15.5	14.0	14.0	11.5	---	---	---	---
MONTH	28.5	21.0	---	---	---	---	18.0	9.5	15.0	8.5	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.5	15.0	23.0	20.0	26.5	24.0	---	---	---	---	---	---
2	19.0	15.0	21.5	20.0	29.0	25.0	---	---	---	---	---	---
3	19.0	15.5	22.0	20.5	28.5	26.0	---	---	---	---	---	---
4	19.0	16.0	23.5	21.5	28.5	24.5	---	---	---	---	---	---
5	20.5	19.0	23.5	21.0	28.0	24.5	---	---	---	---	---	---
6	20.0	18.0	22.0	20.0	29.0	26.5	---	---	---	---	---	---
7	20.0	18.0	21.5	20.5	30.5	28.0	---	---	---	---	---	---
8	17.0	13.5	21.5	20.5	30.5	28.5	---	---	---	---	---	---
9	15.5	13.0	26.0	21.5	29.5	28.0	---	---	---	---	---	---
10	17.0	12.0	25.5	21.5	29.5	27.0	---	---	---	---	---	---
11	19.0	16.0	26.5	22.0	29.5	28.0	---	---	---	---	---	---
12	18.0	14.5	25.5	24.0	29.5	28.0	---	---	---	---	---	---
13	18.0	15.5	24.5	23.5	31.5	28.0	---	---	---	---	---	---
14	18.0	16.0	24.5	21.5	30.5	29.0	---	---	---	---	---	---
15	20.0	15.5	25.0	23.5	30.0	28.5	---	---	---	---	---	---
16	19.5	17.0	24.0	22.0	29.5	28.5	---	---	---	---	---	---
17	20.5	17.0	24.0	23.0	31.5	29.0	---	---	---	---	---	---
18	21.0	19.0	23.0	20.5	33.0	28.5	---	---	---	---	---	---
19	23.0	19.0	24.0	22.0	31.5	28.0	---	---	---	---	---	---
20	23.5	20.5	24.5	22.0	29.0	28.0	---	---	---	---	---	---
21	24.0	20.0	26.5	25.5	31.0	29.0	---	---	---	---	---	---
22	23.5	20.0	27.0	25.5	31.0	28.0	---	---	---	---	---	---
23	22.0	21.0	28.0	25.0	31.0	28.5	---	---	---	---	---	---
24	24.0	18.5	26.5	24.0	31.0	29.0	---	---	---	---	---	---
25	24.0	22.0	26.5	25.5	31.5	28.0	---	---	---	---	---	---
26	24.5	23.0	27.0	26.0	---	---	---	---	---	---	---	---
27	23.5	22.0	26.5	25.5	---	---	---	---	---	---	---	---
28	23.0	20.5	26.0	24.5	---	---	---	---	---	---	---	---
29	22.0	20.0	24.5	20.0	---	---	---	---	---	---	---	---
30	21.0	19.5	22.0	20.0	---	---	---	---	---	---	---	---
31	---	---	27.0	21.5	---	---	---	---	---	---	---	---
MONTH	24.5	12.0	28.0	20.0	33.0	24.0	---	---	---	---	---	---
YEAR	33.0	8.0										

02145518 CATAWBA CREEK NEAR CRAMERTON, N. C.

LOCATION.--Lat 35°11'41", long 81°04'53", Gaston County, at bridge on N. C. Highway 274, 2.8 miles south of Cramerton, and 3.5 miles upstream from mouth.

DRAINAGE AREA.--23.3 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1971-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.									
01...	1115	7.8	0	3.7	1.4	12	1.7	20	0
01... A	1115	--	--	--	--	--	--	--	--
FEB.									
21...	0910	10	0	4.6	1.5	10	1.6	23	0
21... A	0910	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OV.									
1...	16	8.5	11	.1	.00	.000	60	56	.08
1... A	--	--	--	--	--	--	--	--	--
FEB.									
21...	19	10	9.0	.2	.41	.11	60	60	.08
21... A	25	--	--	--	--	--	--	--	--

DATE	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.								
01...	15	0	60	1.3	87	6.2	--	--
01... A	--	--	--	--	--	7.0	19.0	18.5
FEB.								
21...	18	0	52	1.0	92	6.3	--	--
21... A	--	--	--	--	--	7.1	7.0	7.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL MERCURY (HG) (UG/L)
NOV.							
01...	10	--	20	--	--	.10	.7
01... A	--	7.6	--	400	<10	--	--
FEB.							
21...	20	--	18	--	10	.05	<.5
21... A	--	10.2	--	--	--	--	--

02145531 CATAWBA RIVER AT STATE HIGHWAY 49, NEAR PINEVILLE, N. C.

LOCATION.--Lat 35°06'06", long 81°02'23", Mecklenburg County, at bridge on State Highway 49, 0.5 mile downstream from Porters Branch, 10 miles west of Pineville.

DRAINAGE AREA.--2,810 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to June 1973 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.										
17...A	1115	--	--	--	--	--	--	--	--	20
NOV.										
20...	1255	5.5	0	3.9	2.3	5.9	1.9	22	0	18
20...A	1255	--	--	--	--	--	--	--	--	20
JAN.										
17...	1040	5.1	0	4.0	1.4	5.7	1.5	18	0	15
17...A	1040	--	--	--	--	--	--	--	--	16
MAR.										
14...A	1240	--	--	--	--	--	--	--	--	15
APR.										
17...A	1145	--	--	--	--	--	--	--	--	13
MAY										
15...	1315	4.0	--	3.7	1.3	7.1	1.7	15	0	12
15...A	1315	--	--	--	--	--	--	15	0	12
JUNE										
26...A	1100	--	--	--	--	--	--	14	0	15

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.									
17...A	--	--	--	--	--	--	--	--	--
NOV.									
20...	5.8	3.9	.4	--	.20	--	.000	57	54
20...A	--	--	--	--	--	--	--	--	--
JAN.									
17...	7.8	6.4	.0	--	.07	--	.000	48	45
17...A	--	--	--	--	--	--	--	--	--
MAR.									
14...A	--	--	--	--	--	--	--	--	--
APR.									
17...A	--	--	--	--	--	--	--	--	--
MAY									
15...	7.8	5.0	.2	.3	--	.005	.030	47	43
15...A	--	--	--	--	--	--	--	--	--
JUNE									
26...A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
17...A	--	--	--	--	--	98	7.3	22.0	22.0
NOV.									
20...	.08	19	1	47	.9	80	6.3	--	--
20...A	--	--	--	--	--	95	6.9	15.5	16.0
JAN.									
17...	.07	16	1	45	.7	74	6.2	--	--
17...A	--	--	--	--	--	85	5.9	8.0	8.0
MAR.									
14...A	--	--	--	--	--	85	6.3	17.5	26.0
APR.									
17...A	--	--	--	--	--	71	5.8	15.5	22.5
MAY									
15...	.06	15	2	48	.8	70	6.6	--	--
15...A	--	--	--	--	--	58	6.5	21.0	2.2
JUNE									
26...A	--	--	--	--	--	75	6.9	28.5	25.0

02145531 CATAWBA RIVER AT STATE HIGHWAY 49, NEAR PINEVILLE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.							
17...	--	--	--	--	1	--	--
17... A	--	5.8	--	0	--	--	--
NOV.							
20...	5	--	18	--	0	.08	--
20... A	--	8.2	--	47	--	--	--
JAN.							
17...	10	--	18	--	0	.05	--
17... A	--	10.9	--	0	--	--	--
MAR.							
14...	--	--	--	--	0	--	--
14... A	--	17.5	--	56	--	--	--
APR.							
17...	--	--	--	--	0	--	--
17... A	--	10.2	--	336	--	--	--
MAY							
15...	20	--	6.0	--	2	.17	60
15... A	--	8.3	7.6	4	--	--	--
JUNE							
26...	--	--	--	--	0	--	--
26... A	--	6.8	3.6	10	--	--	--

SANTEE RIVER BASIN

02146800 SUGAR CREEK NEAR FORT MILL, S. C.

LOCATION.--Lat 35°00'21", long 80°54'09", York County, at bridge on State Highway 160, 0.7 mile downstream from Clems Branch, and 2.6 miles east of Fort Mill.

DRAINAGE AREA.--262 sq mi.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1972, water year 1973 (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.											
17...	1345	62	--	--	--	--	--	--	--	--	--
17...A	1345	62	--	--	--	--	--	--	--	--	120
NOV.											
20...	1400	2450	8.1	0	7.6	2.9	6.7	3.1	24	0	20
20...A	1400	2450	--	--	--	--	--	--	--	--	--
JAN.											
17...	1450	371	15	0	12	6.7	17	2.8	49	0	40
17...A	1450	371	--	--	--	--	--	--	--	--	49
MAR.											
14...	1445	330	--	--	--	--	--	--	--	--	--
14...A	1445	330	--	--	--	--	--	--	--	--	49
APR.											
17...	1400	204	--	--	--	--	--	--	--	--	--
17...A	1400	204	--	--	--	--	--	--	--	--	35
MAY											
15...	1030	130	23	--	17	5.7	27	5.0	84	0	69
15...A	1030	130	--	--	--	--	--	--	118	0	97
JUNE											
26...	1330	224	--	--	--	--	--	--	--	--	--
26...A	1330	224	--	--	--	--	--	--	76	0	62
SEP.											
05...	1600	53	--	--	--	--	--	--	--	--	--
05...A	1600	53	--	--	--	--	--	--	108	--	89

02146800 SUGAR CREEK NEAR FORT MILL, S. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
OCT.											
17...	--	--	--	--	--	--	--	--	--	--	--
17... A	--	--	--	--	--	--	--	--	--	--	--
NOV.											
20...	15	6.6	.5	--	1.4	--	--	--	--	.36	126
20... A	--	--	--	--	--	--	--	--	--	--	--
JAN.											
17...	21	17	.7	--	2.3	--	--	--	--	.69	123
17... A	--	--	--	--	--	--	--	--	--	--	--
MAR.											
14...	--	--	--	--	--	--	--	--	--	--	--
14... A	--	--	--	--	--	--	--	--	--	--	--
APR.											
17...	--	--	--	--	--	--	--	--	--	--	--
17... A	--	--	--	--	--	--	--	--	--	--	--
MAY											
15...	12	20	.7	6.0	--	.006	--	--	--	.10	178
15... A	--	--	--	--	--	--	--	--	--	--	--
JUNE											
26...	--	--	--	--	--	--	--	--	--	--	--
26... A	--	--	--	--	--	--	--	--	--	--	--
SEP.											
05...	--	--	--	--	--	--	.16	7.0	32	3.9	--
05... A	--	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.											
17...	--	--	--	--	--	--	--	--	--	--	--
17... A	--	--	--	--	--	--	--	450	7.5	20.0	27.5
NOV.											
20...	69	.17	433	31	12	29	.5	110	6.5	--	--
20... A	--	--	--	--	--	--	--	135	6.8	10.0	16.5
JAN.											
17...	129	.17	123	58	18	38	1.0	210	6.6	--	--
17... A	--	--	--	--	--	--	--	225	6.0	6.0	12.0
MAR.											
14...	--	--	--	--	--	--	--	--	--	--	--
14... A	--	--	--	--	--	--	--	210	5.5	17.5	26.5
APR.											
17...	--	--	--	--	--	--	--	--	--	--	--
17... A	--	--	--	--	--	--	--	235	6.2	16.5	25.0
MAY											
15...	120	.24	62.5	66	24	45	1.4	245	6.7	--	--
15... A	--	--	--	--	--	--	--	--	7.1	18.0	20.0
JUNE											
26...	--	--	--	--	--	--	--	--	--	--	--
26... A	--	--	--	--	--	--	--	230	6.6	24.0	31.0
SEP.											
05...	--	--	--	--	--	--	--	--	--	26.0	--
05... A	--	--	--	--	--	--	--	300	7.1	26.0	30.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.												
17...	--	--	--	2.3	--	--	--	--	--	--	25	--
17...A	--	--	4.0	--	--	6000	--	--	--	--	--	--
NOV.												
20...	20	--	--	2.7	12	--	--	--	.03	--	28	--
20...A	--	--	8.6	--	--	27200	--	--	--	--	--	--
JAN.												
17...	15	--	--	4.2	20	--	--	--	.05	--	8	--
17...A	--	--	11.4	--	--	6600	--	--	--	--	--	--
MAR.												
14...	--	--	--	4.0	--	--	--	--	--	7	--	--
14...A	--	--	6.5	--	--	17000	--	--	--	--	--	--
APR.												
17...	--	--	--	2.5	--	--	--	--	--	8	--	--
17...A	--	--	4.3	--	--	94000	--	--	--	--	--	--
MAY												
15...	20	--	--	5.8	27	--	--	--	--	10	--	140
15...A	--	--	3.6	--	15	10000	--	--	--	--	--	--
JUNE												
26...	--	--	--	3.8	--	--	--	--	--	9	--	--
26...A	--	--	4.6	--	31	69000	--	--	--	--	--	--
SEP.												
05...	--	10	--	--	--	--	9.5	9.0	--	--	--	--
05...A	--	--	3.8	--	14	--	--	--	--	--	--	--

02146800 SUGAR CREEK NEAR FORT MILL, S. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	TOTAL IRON IN BOTTOM DE-POSITS (UG/G)	TOTAL MANGA-NESE IN BOTTOM DE-POSITS (UG/G)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)
SEP.										
05..	2200	61	.9	105	1.0	3	0	2	0	2

	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL ZINC IN BOTTOM DE-POSITS (UG/G)
SEP.				
05..	10	.06	10	6.0

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
SEP.				
05...	1600	53	17	2.4

SANTEE RIVER BASIN

02149377 BROAD RIVER NEAR RUTHERFORDTON, N. C.

LOCATION.--Lat 35°17'28", long 81°59'36", Rutherford County, at bridge on Secondary Road 1005, 0.2 mile downstream from Cleghorn Creek, and 5.8 miles south of Rutherfordton.

DRAINAGE AREA.--270 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
22...	1000	659	8.8	0	2.8	1.1	3.0	1.0	18	0
22... A	1000	659	--	--	--	--	--	--	--	--
JAN.										
23...	1730	1200	12	0	2.4	.8	2.5	.9	14	0
23... A	1730	1200	--	--	--	--	--	--	--	--
MAY										
16...	2015	700	15	--	3.3	1.0	3.0	1.1	15	0
16... A	2015	700	--	--	--	--	--	--	15	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NOV.										
22...	15	2.4	2.5	.2	--	.00	--	.000	32	31
22...A	16	--	--	--	--	--	--	--	--	--
JAN.										
23...	11	2.4	3.0	.0	--	.10	--	.000	34	32
23...A	11	--	--	--	--	--	--	--	--	--
MAY										
16...	12	1.2	4.0	.1	.1	--	.005	.020	37	36
16...A	15	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.										
22...	.4	56.4	12	3	34	.4	41	6.5	--	--
22... A	--	--	--	--	--	--	--	5.7	9.0	6.0
JAN.										
23...	.05	110	10	0	34	.4	35	6.2	--	--
23... A	--	--	--	--	--	--	--	7.1	8.0	10.5
MAY										
16...	.05	69.9	12		32	.4	38	6.5	--	--
16... A	--	--	--	--	--	--	39	5.9	16.5	13.5

02149377 BROAD RIVER NEAR RUTHERFORDTON, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)
NOV.					
22...	0	--	9.1	.01	--
22...A	--	12.5	--	--	--
JUN.					
23...	20	--	14	.05	--
23...A	--	12.0	--	--	--
MAY					
16...	10	--	7.6	.13	40
16...A	--	9.0	36	--	--

SANTEE RIVER BASIN

02149540 PULLIAM CREEK NEAR TRYON, N. C.

LOCATION.--Lat 35°16'54", long 82°20'15", Polk County, temperature recorder at gaging station at end of foot trail, 135 ft upstream from small tributary, 0.4 mile upstream from mouth, 1.0 mile downstream from bridge on Secondary Road 1154, and 7.5 miles northwest of Tryon.

DRAINAGE AREA.--2.27 sq mi.

PERIOD OF RECORD.--Water temperatures: July 1972 to September 1973.

EXTREMES.--July 1972 to September 1973:
Water temperatures: Maximum, 20.5°C Aug. 31, Sept. 7, 1973; minimum, freezing point Oct. 20, 22, Dec. 17, 1972.

TEMPERATURE (°C) OF WATER, JULY TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	16.5	15.5	16.0	15.0
2	---	---	---	---	---	---	---	---	16.0	15.5	15.5	11.5
3	---	---	---	---	---	---	---	---	16.5	15.0	15.5	13.0
4	---	---	---	---	---	---	---	---	16.5	16.0	16.0	14.5
5	---	---	---	---	---	---	---	---	16.5	16.0	15.5	14.0
6	---	---	---	---	---	---	---	---	16.5	15.5	15.0	13.5
7	---	---	---	---	---	---	---	---	16.5	15.5	14.5	11.0
8	---	---	---	---	---	---	---	---	16.5	14.5	15.0	11.5
9	---	---	---	---	---	---	---	---	16.5	14.5	16.0	14.5
10	---	---	---	---	---	---	---	---	16.0	15.0	15.0	13.0
11	---	---	---	---	---	---	---	---	15.0	14.5	14.5	10.0
12	---	---	---	---	---	---	---	---	16.0	14.0	15.0	10.5
13	---	---	---	---	---	---	---	---	16.0	14.5	15.0	11.0
14	---	---	---	---	---	---	---	---	16.0	14.0	15.0	12.5
15	---	---	---	---	---	---	---	---	16.5	15.5	16.0	14.0
16	---	---	---	---	---	---	---	---	16.5	15.5	16.0	13.5
17	---	---	---	---	---	---	---	---	16.5	14.5	15.5	14.5
18	---	---	---	---	---	---	---	---	16.5	16.0	16.0	14.5
19	---	---	---	---	---	---	---	---	18.0	16.0	16.0	14.5
20	---	---	---	---	---	---	17.0	16.0	17.0	15.5	15.0	13.0
21	---	---	---	---	---	---	17.0	14.5	16.5	16.0	15.0	12.5
22	---	---	---	---	---	---	17.0	15.5	16.5	15.0	15.0	12.5
23	---	---	---	---	---	---	17.0	16.0	16.5	14.0	15.0	13.5
24	---	---	---	---	---	---	17.0	16.0	16.0	14.5	15.0	14.0
25	---	---	---	---	---	---	17.0	16.0	17.0	15.0	15.0	12.5
26	---	---	---	---	---	---	16.5	16.0	17.0	16.0	16.0	14.5
27	---	---	---	---	---	---	17.0	16.0	17.0	16.0	16.0	15.0
28	---	---	---	---	---	---	16.5	16.0	17.0	14.5	17.0	15.0
29	---	---	---	---	---	---	16.5	16.0	16.0	13.5	16.0	15.5
30	---	---	---	---	---	---	16.0	15.5	16.0	13.0	16.0	9.5
31	---	---	---	---	---	---	16.5	15.5	16.0	14.5	---	---
MONTH	---	---	---	---	---	---	---	---	18.0	13.0	17.0	9.5
YEAR	18.0	9.5										

02149540 PULLIAM CREEK NEAR TRYON, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.5	6.0	8.0	11.5	6.5	8.5	5.5	3.5	---	---	---	---
2	9.5	5.0	7.0	12.0	8.5	10.5	6.5	1.5	4.0	---	---	---
3	10.0	5.5	7.5	13.5	12.0	12.5	9.0	2.5	4.5	---	---	---
4	10.0	8.0	9.0	12.0	8.5	10.5	10.0	3.5	6.5	---	---	---
5	12.5	10.0	11.5	8.5	4.0	6.5	11.0	9.0	---	---	---	---
6	12.5	9.5	11.0	7.0	2.5	4.5	12.5	8.5	10.5	---	---	---
7	12.5	10.0	11.0	6.5	4.5	5.0	8.0	3.5	5.0	---	---	---
8	11.0	8.5	9.5	10.0	5.0	---	4.5	4.0	4.0	---	---	---
9	11.5	8.0	9.5	11.0	5.0	7.5	12.5	4.5	8.5	---	---	---
10	10.0	6.5	8.5	10.5	5.5	7.5	13.5	11.0	12.0	---	---	---
11	8.5	3.5	6.0	11.0	6.5	9.5	11.5	8.5	9.5	---	---	---
12	11.0	5.5	8.5	10.0	5.0	7.0	8.5	6.0	7.0	---	---	---
13	12.5	10.0	11.0	8.5	7.0	8.0	10.5	6.0	8.5	---	---	---
14	12.5	9.5	11.0	13.0	7.5	10.0	10.0	9.0	9.5	---	---	---
15	12.5	9.0	11.0	7.5	3.5	6.0	8.5	6.0	7.0	---	---	---
16	12.0	7.0	9.5	4.5	3.0	4.0	6.0	0.5	---	---	---	---
17	13.5	11.0	12.0	7.0	3.0	4.5	0.0	0.0	0.0	---	---	---
18	11.0	8.5	9.5	6.0	3.0	4.5	---	---	---	---	---	---
19	9.0	3.5	7.5	---	---	---	---	---	---	8.5	4.5	---
20	4.0	0.0	2.0	---	---	---	---	---	---	6.0	3.0	4.0
21	4.0	---	---	---	---	---	---	---	---	3.5	1.5	2.5
22	7.0	0.0	3.0	---	---	---	---	---	---	7.0	2.0	4.5
23	8.5	5.0	7.0	---	---	---	---	---	---	7.0	4.0	5.0
24	12.0	8.5	10.0	---	---	---	---	---	---	5.0	1.0	3.0
25	9.5	6.5	8.0	---	---	---	---	---	---	6.5	1.0	3.0
26	8.5	7.0	8.0	---	---	---	---	---	---	4.5	1.5	3.0
27	7.0	5.5	6.0	---	---	---	---	---	---	7.5	4.5	5.5
28	11.0	6.5	8.5	---	---	---	---	---	---	6.0	4.5	5.0
29	11.5	8.0	9.5	---	---	---	---	---	---	5.5	1.5	3.0
30	9.5	5.5	7.5	---	---	---	---	---	---	2.0	1.5	1.5
31	9.0	7.5	8.0	---	---	---	---	---	---	3.0	1.5	2.0
MONTH	13.5	0.0	8.5	---	---	---	---	---	---	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.5	2.0	2.5	9.5	4.0	6.0	17.5	13.0	14.5	19.0	13.0	15.5
2	9.5	5.0	7.0	8.5	3.5	6.0	16.0	9.5	12.0	16.5	15.0	15.5
3	6.0	4.0	5.0	11.0	8.5	9.5	16.5	8.0	12.0	15.5	10.5	---
4	7.5	2.0	4.5	13.5	9.5	11.0	17.5	10.5	14.0	13.5	7.0	10.0
5	9.5	4.0	5.5	15.5	11.0	12.5	13.0	8.5	10.0	13.0	4.5	8.5
6	8.0	5.5	6.5	12.0	10.5	11.5	15.0	6.5	10.5	11.0	5.5	8.5
7	10.0	4.5	6.5	11.5	10.5	10.5	10.5	9.5	10.0	13.5	8.5	11.0
8	7.5	4.5	6.5	15.0	10.5	12.5	11.5	9.5	10.5	12.0	11.5	12.0
9	4.0	---	---	---	---	---	10.5	9.0	10.0	15.0	11.0	13.0
10	---	---	---	---	---	---	9.0	5.5	7.0	16.0	10.0	13.0
11	3.0	---	---	---	---	---	10.5	4.0	7.0	16.5	11.0	13.5
12	2.0	---	---	16.0	9.0	12.0	14.5	4.0	9.0	15.0	10.5	12.5
13	5.0	---	---	16.0	8.5	12.0	13.0	6.5	9.0	14.0	9.0	11.5
14	---	---	---	18.5	9.5	13.5	13.5	4.5	9.5	14.0	8.0	11.0
15	---	---	---	16.5	14.5	15.5	15.0	5.5	10.0	12.0	9.5	11.0
16	---	---	---	15.5	14.0	14.5	13.5	8.0	11.0	12.0	6.5	9.5
17	---	---	---	14.5	7.5	11.0	13.0	11.5	12.0	11.5	7.0	9.0
18	---	---	---	11.5	5.5	9.0	14.0	12.0	13.0	11.0	4.0	8.0
19	---	---	---	13.0	6.0	9.5	14.0	13.0	13.5	12.0	6.5	9.5
20	---	---	---	11.0	9.5	9.5	16.5	10.5	13.5	13.5	10.5	12.0
21	6.0	3.0	---	10.5	5.5	9.0	19.5	11.5	15.0	14.5	9.0	11.5
22	5.0	1.0	2.5	10.5	4.5	7.0	19.0	12.0	15.5	15.0	9.0	12.0
23	7.0	1.0	3.0	13.5	5.0	8.5	18.5	15.0	16.5	16.0	11.5	14.0
24	9.0	1.0	4.0	13.0	5.0	8.5	17.5	12.0	15.0	14.5	13.0	14.0
25	9.0	1.5	5.0	9.5	7.5	8.5	16.0	15.0	15.5	15.0	11.5	13.5
26	9.0	6.5	7.5	11.5	8.5	10.0	18.5	13.5	16.0	15.0	11.0	13.0
27	8.5	6.5	7.5	15.5	8.5	---	15.5	12.0	14.5	15.0	13.5	13.5
28	8.5	4.5	6.0	12.0	10.0	10.5	14.5	9.5	11.5	15.5	14.0	14.5
29	---	---	---	10.0	9.0	9.0	16.0	6.5	11.0	16.0	13.5	14.5
30	---	---	---	15.0	9.0	11.5	18.0	9.5	13.5	16.0	12.0	14.0
31	---	---	---	13.5	13.0	13.0	---	---	---	15.5	10.5	13.5
MONTH	---	---	---	16.5	3.5	10.5	19.5	4.0	12.0	19.0	4.0	12.0

02149540 PULLIAM CREEK NEAR TRYON, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	JUNE			JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.5	11.5	13.5	18.0	16.0	17.0	19.0	18.0	18.5	20.0	17.0	19.0
2	16.5	13.0	14.5	19.0	16.0	17.5	19.0	18.0	18.5	20.0	18.5	19.0
3	17.5	13.5	15.5	18.5	16.5	18.0	19.5	18.0	18.5	20.0	18.5	19.0
4	18.0	14.0	16.0	19.5	17.5	18.5	19.5	18.0	19.0	20.0	18.5	19.0
5	17.5	13.5	15.5	19.5	17.5	18.5	19.5	18.0	19.0	20.0	17.0	19.0
6	15.5	14.5	15.0	19.0	16.5	18.0	19.5	18.0	18.5	19.5	17.0	18.5
7	16.5	14.5	15.5	19.5	17.5	18.5	19.5	18.5	19.0	20.5	18.5	19.5
8	17.5	14.5	15.5	19.0	17.5	18.5	19.5	17.0	18.5	20.0	18.0	19.5
9	16.0	15.0	15.5	19.5	17.5	18.5	20.0	17.0	18.5	20.0	18.5	20.0
10	18.0	15.5	16.5	20.0	17.5	18.5	19.5	19.0	19.5	20.0	19.5	19.5
11	18.0	15.5	16.5	19.5	18.5	19.0	20.0	18.0	19.0	19.5	18.5	19.0
12	19.0	15.0	17.0	19.0	17.5	18.5	20.0	19.0	19.5	19.0	16.0	17.5
13	18.0	16.0	16.5	19.5	15.0	17.5	20.0	19.0	19.5	17.0	15.0	16.5
14	18.0	15.5	17.0	20.0	18.0	18.5	20.0	18.5	19.5	20.0	17.0	18.5
15	17.5	15.5	16.5	19.0	18.5	18.5	20.0	18.5	19.5	18.5	17.0	18.0
16	17.5	16.0	16.5	19.5	18.0	18.5	19.5	16.5	18.0	18.5	16.0	17.5
17	19.0	16.0	17.5	19.0	18.0	18.5	19.5	16.5	17.5	18.0	16.5	17.5
18	18.5	15.0	17.0	18.0	17.5	18.0	19.0	18.0	18.5	18.5	15.5	17.0
19	18.0	16.0	17.0	18.5	16.5	17.5	18.5	16.0	17.5	15.5	13.0	14.0
20	18.0	16.0	17.0	19.0	17.5	18.5	18.0	16.5	17.5	16.0	13.0	14.0
21	18.0	16.5	17.0	19.5	17.5	18.5	18.0	16.0	17.0	16.5	13.5	15.0
22	18.0	16.0	17.0	19.5	18.0	19.0	18.0	15.5	16.5	18.5	16.0	17.0
23	18.5	16.0	17.0	19.5	18.0	19.0	18.0	16.0	17.0	19.0	16.5	18.0
24	18.0	14.5	16.0	19.0	18.0	---	18.0	14.5	16.5	19.0	16.5	17.5
25	18.0	14.5	16.0	18.0	18.0	18.0	19.0	16.0	17.5	18.5	18.0	18.0
26	18.0	14.5	16.0	19.0	17.0	18.0	19.0	16.0	17.5	18.0	16.5	17.0
27	17.5	14.5	16.0	19.5	17.0	18.5	19.5	16.5	18.0	17.0	16.5	17.0
28	18.5	15.5	17.0	19.5	17.0	18.5	20.0	17.0	18.5	19.0	16.0	17.5
29	18.0	15.0	16.5	20.0	17.0	18.5	20.0	18.0	---	19.0	17.0	18.0
30	18.0	14.5	16.0	19.5	16.5	18.5	20.0	19.0	19.5	19.0	17.0	18.0
31	---	---	---	19.0	18.0	18.5	20.5	18.5	19.5	---	---	---
MONTH	19.0	11.5	16.0	20.0	15.0	18.5	20.5	14.5	18.5	20.5	13.0	18.0
YEAR	20.5	0.0	12.5									

02149702 GREEN RIVER NEAR SALUDA, N. C.

LOCATION.--Lat 35°18'20", long 82°16'31", Polk County, temperature recorder at gaging station on left bank 90 ft upstream from bridge on Secondary Road 1151, 0.5 mile downstream from Laurel Branch, and 6.5 miles northeast of Saluda.

DRAINAGE AREA.--104 sq mi.

PERIOD OF RECORD.--Water temperatures: August 1972 to September 1973.

EXTREMES.--August 1972 to September 1973:
Water temperatures: Maximum, 23.0°C Aug. 19, 20, 21, 1972; minimum, 2.0°C Jan. 13, 14, 15, 1973.

TEMPERATURE (°C) OF WATER, AUGUST TO SEPTEMBER 1972
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	21.5	21.0
2	---	---	---	---	---	---	---	---	---	---	21.0	21.0
3	---	---	---	---	---	---	---	---	---	---	21.0	21.0
4	---	---	---	---	---	---	---	---	22.0	22.0	21.0	21.0
5	---	---	---	---	---	---	---	---	22.0	22.0	21.0	21.0
6	---	---	---	---	---	---	---	---	22.0	21.5	21.0	21.0
7	---	---	---	---	---	---	---	---	21.5	21.0	21.0	20.5
8	---	---	---	---	---	---	---	---	22.0	21.5	21.0	21.0
9	---	---	---	---	---	---	---	---	22.0	20.5	21.5	21.0
10	---	---	---	---	---	---	---	---	22.0	22.0	21.5	21.0
11	---	---	---	---	---	---	---	---	22.0	21.5	21.5	20.5
12	---	---	---	---	---	---	---	---	21.5	21.5	20.5	20.5
13	---	---	---	---	---	---	---	---	21.5	21.0	20.5	20.5
14	---	---	---	---	---	---	---	---	21.0	21.0	20.5	20.5
15	---	---	---	---	---	---	---	---	21.5	20.5	20.5	20.5
16	---	---	---	---	---	---	---	---	21.5	20.5	20.5	20.5
17	---	---	---	---	---	---	---	---	22.0	20.5	20.5	20.5
18	---	---	---	---	---	---	---	---	21.5	21.0	20.5	20.5
19	---	---	---	---	---	---	---	---	23.0	21.5	20.5	20.5
20	---	---	---	---	---	---	---	---	23.0	23.0	21.0	20.5
21	---	---	---	---	---	---	---	---	23.0	22.0	20.5	20.5
22	---	---	---	---	---	---	---	---	22.0	20.5	21.0	21.0
23	---	---	---	---	---	---	---	---	20.5	20.0	21.0	21.0
24	---	---	---	---	---	---	---	---	20.0	20.0	21.0	21.0
25	---	---	---	---	---	---	---	---	20.0	20.0	21.0	21.0
26	---	---	---	---	---	---	---	---	20.0	20.0	21.0	21.0
27	---	---	---	---	---	---	---	---	20.5	20.5	21.0	19.5
28	---	---	---	---	---	---	---	---	21.0	21.0	20.5	20.0
29	---	---	---	---	---	---	---	---	21.5	21.5	20.5	20.0
30	---	---	---	---	---	---	---	---	22.0	21.5	20.0	17.5
31	---	---	---	---	---	---	---	---	22.0	21.5	---	---
MONTH	---	---	---	---	---	---	---	---	23.0	20.0	21.5	17.5
YEAR	23.0	17.5										

02149702 GREEN RIVER NEAR SALUDA, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	15.0	15.0	14.0	6.0	5.0	9.0	8.0	5.5	4.5	6.5	6.0
2	16.0	14.5	16.0	14.5	7.5	5.5	9.0	8.5	7.0	5.5	6.5	6.0
3	17.5	16.0	18.0	15.5	8.5	6.5	8.5	8.0	7.0	6.5	8.5	6.5
4	17.5	17.5	18.0	16.0	9.5	7.5	8.5	8.0	6.5	5.5	8.5	8.0
5	17.5	17.5	16.0	14.0	9.0	8.0	8.5	8.5	7.0	6.0	9.5	8.5
6	17.5	17.5	14.5	11.5	10.5	9.5	8.5	8.5	7.0	6.5	9.0	8.5
7	17.5	17.5	13.0	11.0	10.0	8.5	8.5	6.5	8.0	6.5	8.5	8.5
8	17.5	16.5	11.0	10.0	8.5	8.5	6.5	6.0	8.0	7.0	9.5	8.5
9	16.5	15.0	13.0	11.0	10.0	8.5	6.0	6.0	7.0	5.5	9.0	9.0
10	16.0	15.0	13.5	11.5	11.5	10.0	6.0	6.0	5.5	5.0	9.0	9.0
11	15.0	13.5	13.5	11.5	11.5	10.0	6.0	6.0	5.0	4.5	9.0	9.0
12	14.5	13.5	13.5	11.0	10.0	9.5	6.0	5.0	5.0	3.5	10.0	9.0
13	15.0	14.5	13.0	10.0	10.0	9.0	5.0	2.0	5.5	4.5	11.0	9.0
14	15.0	15.0	14.0	13.0	10.5	10.0	2.0	2.0	5.5	5.5	11.5	9.0
15	15.0	15.0	13.0	9.5	10.0	9.5	4.5	2.0	6.5	5.5	11.5	11.0
16	15.0	14.5	9.5	7.5	9.5	8.0	4.5	4.0	6.0	5.5	11.5	11.0
17	15.5	14.5	8.0	6.0	8.0	7.0	5.0	4.5	5.5	3.0	11.5	10.0
18	15.5	14.5	8.0	6.0	7.0	6.5	5.5	4.5	4.0	3.0	10.0	9.5
19	15.5	13.0	8.5	7.5	8.0	6.5	6.5	5.5	5.0	3.5	10.5	9.0
20	13.0	10.0	9.0	7.5	8.5	8.0	6.5	5.5	5.0	4.0	9.5	9.0
21	10.0	10.0	7.5	6.0	8.5	8.5	6.5	5.5	5.5	4.5	9.5	9.0
22	10.0	10.0	6.5	5.5	9.0	8.5	6.5	5.5	5.5	4.5	9.5	8.5
23	12.5	10.0	5.5	4.5	9.0	8.5	6.5	6.0	5.5	4.5	9.5	8.5
24	13.5	12.5	6.5	5.5	9.0	9.0	6.0	5.5	5.5	4.5	9.5	9.0
25	13.5	13.5	5.5	4.5	9.0	9.0	5.5	5.0	6.0	5.0	9.5	9.0
26	13.5	13.0	7.5	5.0	9.0	8.0	5.5	5.5	6.5	6.0	10.0	9.0
27	13.0	12.5	7.0	4.5	8.0	8.0	6.5	5.5	6.5	6.5	10.5	8.5
28	12.5	12.5	8.5	5.5	8.5	8.0	6.5	6.0	6.5	6.5	10.5	10.0
29	13.0	12.5	8.0	6.0	8.5	8.0	6.0	5.0	---	---	10.0	9.5
30	13.5	11.0	6.5	5.0	8.5	8.0	5.0	4.5	---	---	10.5	9.0
31	14.0	13.0	---	---	9.0	8.5	5.0	4.5	---	---	10.5	10.5
MONTH	17.5	10.0	18.0	4.5	11.5	5.0	9.0	2.0	8.0	3.0	11.5	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.5	14.0	11.5	16.5	15.0	19.5	19.0	21.0	20.5	21.5	20.5
2	11.0	10.0	14.0	13.5	17.0	15.0	20.0	19.0	21.0	20.5	21.5	20.5
3	11.5	10.0	14.0	13.5	18.0	15.5	20.0	20.0	21.5	20.5	21.5	20.5
4	12.0	11.0	13.5	11.5	18.0	16.0	21.0	20.0	21.0	20.5	21.0	20.5
5	11.0	10.0	13.5	10.5	18.0	16.0	22.0	20.0	21.5	20.5	21.0	20.5
6	11.0	9.0	13.0	11.0	17.0	16.0	21.5	20.0	21.0	20.5	21.0	20.0
7	11.0	10.0	14.0	11.5	17.0	16.0	22.0	20.0	21.0	20.5	22.0	21.0
8	10.0	10.0	14.0	13.5	18.0	16.5	20.5	20.0	21.0	20.0	21.5	21.0
9	10.0	10.0	15.0	13.5	18.0	17.0	21.0	20.0	22.0	20.0	21.5	21.5
10	10.0	9.0	15.5	14.0	18.5	17.0	21.0	20.0	22.0	21.5	21.5	20.5
11	9.5	8.5	16.0	14.5	18.5	17.0	21.0	20.5	21.5	20.0	20.5	20.0
12	10.5	8.5	16.0	14.0	18.5	18.0	21.0	20.0	21.0	21.0	20.5	19.5
13	10.5	9.0	15.0	13.0	18.0	18.0	22.0	20.0	21.0	20.5	20.5	19.5
14	10.0	8.5	15.0	13.0	18.0	17.0	21.0	20.0	21.0	20.5	20.5	19.5
15	11.0	9.0	15.0	14.0	18.0	18.0	20.5	20.5	21.5	20.5	20.5	20.0
16	10.5	9.5	14.5	12.0	18.5	18.0	20.5	20.5	21.0	20.0	20.0	20.0
17	10.0	10.0	14.0	12.0	18.5	18.0	20.5	19.5	21.0	20.0	20.0	20.0
18	10.5	10.0	14.0	10.5	19.5	18.0	20.0	19.5	21.0	20.0	20.0	20.0
19	10.5	10.5	13.5	11.5	19.5	18.5	20.0	19.5	21.0	20.0	20.0	18.5
20	11.5	10.5	15.0	13.5	19.0	18.5	20.5	20.0	20.0	20.0	19.5	18.5
21	13.5	11.0	15.0	13.0	19.0	19.0	21.0	20.0	20.0	20.0	19.5	19.0
22	13.5	11.5	15.5	13.5	19.0	19.0	20.5	20.0	20.0	19.5	19.0	19.0
23	13.5	12.0	16.0	15.0	20.0	19.0	20.0	20.0	20.0	20.0	20.0	19.0
24	13.0	11.5	16.0	15.0	20.0	19.0	20.0	19.5	20.5	19.5	20.0	20.0
25	12.0	12.0	16.0	14.5	19.5	19.0	20.0	20.0	21.0	20.0	20.0	20.0
26	13.5	12.0	16.0	15.0	19.5	18.5	20.5	20.0	21.0	20.0	20.0	20.0
27	13.5	12.0	15.5	15.0	19.5	19.0	20.5	20.5	21.5	20.5	20.0	20.0
28	12.0	11.0	16.0	15.0	19.5	19.0	21.5	20.5	21.5	20.5	20.5	20.0
29	13.0	10.0	16.5	16.0	19.5	18.5	21.5	20.5	21.0	20.0	20.0	20.0
30	13.5	11.0	16.5	15.0	19.5	19.5	21.5	20.5	21.5	20.5	20.0	20.0
31	---	---	16.5	15.0	---	---	21.0	20.5	21.5	21.0	---	---
MONTH	13.5	8.5	16.5	10.5	20.0	15.0	22.0	19.0	22.0	19.5	22.0	18.5
YEAR	22.0	2.0										

02150062 GREEN RIVER NEAR GREEN RIVER, N. C.

LOCATION.--Lat 35°15'36", long 81°59'02", Polk County, at bridge on Secondary Road 1302, 1 mile upstream from mouth, and 4 miles east of Green River.

DRAINAGE AREA.--240 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
22...	1115	789	12	0	2.5	.9	2.3	1.0	13	0
22... A	1115	789	--	--	--	--	--	--	--	--
JAN.										
23...	1445	1400	11	0	2.0	.8	1.8	.7	11	0
23... A	1445	1400	--	--	--	--	--	--	--	--
MAY										
17...	0900	274	13	--	2.7	1.0	2.3	.9	12	0
17... A	0900	274	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NOV.										
22...	11	1.8	2.0	.2	--	.07	--	.000	31	30
22... A	--	--	--	--	--	--	--	--	--	--
JAN.										
23...	9	1.4	2.0	.1	--	.20	--	.000	27	26
23... A	--	--	--	--	--	--	--	--	--	--
MAY										
17...	10	15	4.8	.1	.2	--	.005	.010	37	33
17... A	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.										
22...	.04	66.0	10	0	31	.3	33	5.9	--	--
22... A	--	--	--	--	--	--	42	5.8	9.0	8.5
JAN.										
23...	.04	102	9	0	30	.3	30	6.1	--	--
23... A	--	--	--	--	--	--	--	6.3	7.0	17.5
MAY										
17...	.05	27.4	11	1	29	.3	35	6.5	--	--
17... A	--	--	--	--	--	--	36	6.0	13.5	11.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
NOV.					
22...	0	--	26	.02	--
22... A	--	12.5	--	--	--
JAN.					
23...	10	--	14	.05	--
23... A	--	11.4	--	--	--
MAY					
17...	10	--	6.1	.14	40
17... A	--	9.5	--	--	--

02151000 SECOND BROAD RIVER AT CLIFFSIDE, N. C.

LOCATION.--Lat 35°14'08", long 81°45'57", Rutherford County, at gaging station on left bank 0.2 mile downstream from dam at Cliffside Mills, at Cliffside, and 1.3 miles upstream from mouth.

DRAINAGE AREA.--211 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1948 to September 1949, October 1956 to September 1960, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1948 to September 1949, October 1956 to September 1960.

EXTREMES.--1948-49, 1956-60:
Dissolved solids: Maximum, 77 mg/l Oct. 11-20, 1956; minimum, 36 mg/l Nov. 21-30, 1948.
Hardness: Maximum, 23 mg/l Oct. 21-31, 1957; minimum, 6 mg/l June 2, 1959.
Specific conductance (1956-60): Maximum daily, 137 micromhos Oct. 5, 1956; minimum daily, 26 micromhos Feb. 6, 1960.
Water temperatures: Maximum, 26.5°C June 26-29, July 28, 1949; minimum, freezing point Feb. 17-19, 1958, Jan. 22, 1960.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1955-56, 1961-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
29...	1020	88	13	[illegible]	3.6	1.5	8.8	1.2	24	0
29... A	1020	88	--	--	--	--	--	--	--	--
FEB.										
20...	1130	355	14	30	3.4	1.4	4.1	1.0	20	0
20... A	1130	355	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
NOV.									
29...	20	5.2	8.6	.1	.00	.050	62	54	.08
29... A	--	--	--	--	--	--	--	--	--
FEB.									
20...	16	3.0	4.6	.0	.00	.000	41	42	.06
20... A	22	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.									
29...	14.7	15	0	53	1.0	76	6.4	--	--
29... A	--	--	--	--	--	--	7.0	7.0	1.0
FEB.									
20...	39.3	15	0	36	.5	55	6.3	--	--
20... A	--	--	--	--	--	--	6.5	4.0	--

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
NOV.					
29...	5	--	15	--	.01
29... A	--	9.7	--	300	--
FEB.					
20...	15	--	16	10	.05
20... A	--	12.9	--	--	--

02152596 FIRST BROAD RIVER NEAR EARL, N. C.

LOCATION.--Lat 35°13'03", long 81°37'37", Cleveland County, at bridge on Secondary Road 1140, 3 miles upstream from mouth, and 4.8 miles northwest of Earl.

DRAINAGE AREA.--292 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
21...	1525	385	10	0	3.1	1.4	4.3	2.2	15	0
21... A	1525	385	--	--	--	--	--	--	--	--
MAR.										
15...	1200	620	10	0	3.1	1.2	3.3	1.6	12	0
15... A	1200	620	--	--	--	--	--	--	--	--
MAY										
16...	1730	412	12	--	2.8	1.2	4.7	1.8	13	0
16... A	1730	412	--	--	--	--	--	--	16	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NOV.										
21...	12	4.2	5.0	.2	--	.40	--	.000	41	40
21... A	13	--	--	--	--	--	--	--	--	--
MAR.										
15...	10	6.0	4.4	.1	--	.47	--	.000	40	34
15... A	11	--	--	--	--	--	--	--	--	--
MAY										
16...	11	3.6	3.5	.2	.4	--	.005	.12	43	38
16... A	13	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPE-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.										
21...	.06	42.3	14	1	36	.5	53	6.7	--	--
21... A	--	--	--	--	--	--	--	5.9	9.0	12.0
MAR.										
15...	.05	67.0	13	3	33	.4	46	5.9	--	--
15... A	--	--	--	--	--	--	50	6.4	15.5	23.0
MAY										
16...	.06	47.5	12	1	42	.6	55	6.4	--	--
16... A	--	--	--	--	--	--	55	6.1	17.0	21.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
NOV.					
21...	3	--	4.6	.06	--
21... A	--	12.2	--	--	--
MAR.					
15...	5	--	24	.06	--
15... A	--	8.7	--	--	--
MAY					
15...	10	--	4.3	.15	40
16... A	--	9.0	20	--	--

02152622 BROAD RIVER NEAR EARL, N. C.

LOCATION.--Lat 35°10'48", long 81°37'06", Cleveland County, at Ellis Ferry, 2 miles downstream from First Broad River, and 5 miles west of Earl.

DRAINAGE AREA.--1,270 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-69 (partial-record station), October 1969 to June 1973 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
19... A	1200	1360	--	--	--	--	--	--	--	--
NOV.										
21...	1400	2300	9.3	0	2.8	1.1	3.5	2.3	15	0
21... A	1400	2300	--	--	--	--	--	--	--	--
JAN.										
22...	1430	5600	5.4	5	4.1	1.4	4.1	2.5	14	0
22... A	1430	5600	--	--	--	--	--	--	--	--
MAR.										
15... A	1015	3050	--	--	--	--	--	--	--	--
APR.										
18... A	1230	2700	--	--	--	--	--	--	--	--
MAY										
16...	1345	2350	12	--	3.1	1.1	3.9	1.4	13	0
16... A	1345	2350	--	--	--	--	--	--	16	0
JUNE										
27... A	1200	1650	--	--	--	--	--	--	16	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
19... A	--	--	--	--	--	--	--	--	--	--
NOV.										
21...	12	4.0	4.8	.2	--	.20	--	.000	44	35
21... A	13	--	--	--	--	--	--	--	--	--
JAN.										
22...	11	5.6	5.6	.1	--	.30	--	.13	60	42
22... A	11	--	--	--	--	--	--	--	--	--
MAR.										
15... A	12	--	--	--	--	--	--	--	--	--
APR.										
18... A	--	--	--	--	--	--	--	--	--	--
MAY										
16...	11	.3	5.5	.1	.3	--	.004	.020	41	35
16... A	13	--	--	--	--	--	--	--	--	--
JUNE										
27... A	13	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.										
19... A	--	--	--	--	--	--	74	7.3	14.5	11.5
NOV.										
21...	.06	273	12	0	35	.4	49	5.9	--	--
21... A	--	--	--	--	--	--	65	5.9	9.5	8.0
JAN.										
22...	.08	907	16	5	32	.4	58	5.8	--	--
22... A	--	--	--	--	--	--	60	5.9	8.0	12.0
MAR.										
15... A	--	--	--	--	--	--	46	6.0	15.5	21.5
APR.										
18... A	--	--	--	--	--	--	45	6.1	15.0	22.5
MAY										
16...	.06	260	12	2	38	.5	45	6.5	--	--
16... A	--	--	--	--	--	--	45	6.2	17.5	21.5
JUNE										
27... A	--	--	--	--	--	--	50	6.2	22.0	30.5

02152622 BROAD RIVER NEAR EARL, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.						
19... A	--	8.7	--	140	--	--
NOV.						
21...	5	--	30	--	.03	--
21... A	--	12.4	--	350	--	--
JAN.						
22...	200	--	36	--	.04	--
22... A	--	12.4	--	--	--	--
MAR.						
15... A	--	9.4	--	160	--	--
APR.						
18... A	--	9.5	--	30	--	--
MAY						
16...	5	--	6.6	--	.14	60
16... A	--	9.7	16	24	--	--
JUNE						
27... A	--	5.4	16	20	--	--

SANTEE RIVER BASIN

02153456 BUFFALO CREEK NEAR GROVER, N. C.

LOCATION.--Lat 35°10'16", long 81°31'04", Cleveland County, at bridge on State Highway 198, 0.1 mile upstream from North Carolina-South Carolina State line, and 4 miles west of Grover.

DRAINAGE AREA.--170 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-69 (partial-record station), October 1969 to June 1973 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
19...	0930	81	--	--	--	--	--	--	--	--
19... A	0930	81	--	--	--	--	--	--	--	--
NOV.										
21...	1130	190	11	0	3.8	1.4	15	3.0	21	0
21... A	1130	190	--	--	--	--	--	--	--	--
JAN.										
22...	0800	1890	8.8	0	3.6	1.4	7.5	2.1	15	0
22... A	0800	1890	--	--	--	--	--	--	--	--
MAR.										
15... A	0800	303	--	--	--	--	--	--	--	--
APR.										
18...	1045	379	--	--	--	--	--	--	--	--
18... A	1045	379	--	--	--	--	--	--	--	--
MAY										
16...	0845	264	12	--	4.1	1.5	4.5	2.2	19	0
16... A	0845	264	--	--	--	--	--	--	18	0
JUNE										
27...	0930	195	--	--	--	--	--	--	--	--
27... A	0930	195	--	--	--	--	--	--	22	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
19...	--	--	--	--	--	--	--	--	--	--
19... A	22	--	--	--	--	--	--	--	--	--
NOV.										
21...	17	6.8	19	.2	--	.29	--	.020	79	71
21... A	16	--	--	--	--	--	--	--	--	--
JAN.										
22...	12	6.2	7.5	.1	--	.50	--	.07	51	47
22... A	13	--	--	--	--	--	--	--	--	--
MAR.										
15... A	14	--	--	--	--	--	--	--	--	--
APR.										
18...	--	--	--	--	--	--	--	--	--	--
18... A	--	--	--	--	--	--	--	--	--	--
MAY										
16...	16	5.0	7.4	.2	.7	--	.005	.030	62	50
16... A	15	--	--	--	--	--	--	--	--	--
JUNE										
27...	--	--	--	--	--	--	--	--	--	--
27... A	18	--	--	--	--	--	--	--	--	--

02153456 BUFFALO CREEK NEAR GROVER, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.										
19...	--	--	--	--	--	--	--	--	--	--
19... A	--	--	--	--	--	--	150	6.4	14.5	13.0
NOV.										
21...	.11	40.5	16	0	63	1.7	110	6.1	--	--
21... A	--	--	--	--	--	--	135	6.0	9.5	11.5
JAN.										
22...	.07	260	15	3	48	.8	76	5.9	--	--
22... A	--	--	--	--	--	--	80	5.8	7.0	7.5
MAR.										
15... A	--	--	--	--	--	--	75	6.2	14.5	19.5
APR.										
18...	--	--	--	--	--	--	--	--	--	--
18... A	--	--	--	--	--	--	60	6.1	14.0	19.0
MAY										
16...	.08	44.2	15	1	47	.9	82	6.6	--	--
16... A	--	--	--	--	--	--	81	6.0	14.5	13.0
JUNE										
27...	--	--	--	--	--	--	--	--	--	--
27... A	--	--	--	--	--	--	85	6.2	21.0	25.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.							
19...	--	--	--	--	0	--	--
19... A	--	9.1	--	20	--	--	--
NOV.							
21...	30	--	27	--	0	.07	--
21... A	--	11.0	--	460	--	--	--
JAN.							
22...	140	--	30	--	0	.06	--
22... A	--	10.3	--	1500	--	--	--
MAR.							
15... A	--	14.5	--	310	--	--	--
APR.							
18...	--	--	--	--	0	--	--
18... A	--	9.7	--	70	--	--	--
MAY							
16...	40	--	7.6	--	0	.20	60
16... A	--	9.5	29	2600	--	--	--
JUNE							
27...	--	--	--	--	0	--	--
27... A	--	6.1	22	620	--	--	--

02154020 NORTH PACOLET RIVER NEAR SANDY PLAINS, N. C.
(Radiochemical station)

LOCATION.--Lat 35°12'58", long 82°10'52", Polk County, at bridge on Secondary Road 1517, 1.2 miles downstream from Horse Creek, and 5.6 miles southwest of Sandy Plains.

DRAINAGE AREA.--44.8 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-69 (partial-record station), October 1969 to June 1973 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
19...	1545	57	--	--	--	--	--	--	--	--
19... A	1545	57	--	--	--	--	--	--	--	--
NOV.										
22...	1330	98	13	0	3.9	2.1	8.4	1.8	28	0
22... A	1330	98	--	--	--	--	--	--	--	--
JAN.										
22...	1730	147	9.3	0	3.0	1.1	4.6	1.2	18	0
22... A	1730	147	--	--	--	--	--	--	--	--
MAR.										
15...	1400	142	--	--	--	--	--	--	--	--
15... A	1400	142	--	--	--	--	--	--	--	--
APR.										
18...	1530	183	--	--	--	--	--	--	--	--
18... A	1530	183	--	--	--	--	--	--	--	--
MAY										
17...	1215	155	14	--	3.6	1.3	9.5	1.3	17	0
17... A	1215	155	--	--	--	--	--	--	19	0
JUNE										
27...	1515	117	--	--	--	--	--	--	--	--
27... A	1515	117	--	--	--	--	--	--	20	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
19...	--	--	--	--	--	--	--	--	--	--
19... A	28	--	--	--	--	--	--	--	--	--
NOV.										
22...	23	5.0	7.2	.2	--	.20	--	.26	56	57
22... A	23	--	--	--	--	--	--	--	--	--
JAN.										
22...	15	2.4	4.4	.1	--	.09	--	.000	40	36
22... A	13	--	--	--	--	--	--	--	--	--
MAR.										
15...	--	--	--	--	--	--	--	--	--	--
15... A	16	--	--	--	--	--	--	--	--	--
APR.										
18...	--	--	--	--	--	--	--	--	--	--
18... A	--	--	--	--	--	--	--	--	--	--
MAY										
17...	14	11	4.5	.1	.2	--	.005	.030	60	54
17... A	16	--	--	--	--	--	--	--	--	--
JUNE										
27...	--	--	--	--	--	--	--	--	--	--
27... A	16	--	--	--	--	--	--	--	--	--

02154020 NORTH PACOLET RIVER NEAR SANDY PLAINS, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.										
19...	--	--	--	--	--	--	--	--	--	--
19... A	--	--	--	--	--	--	120	7.2	15.0	14.5
NOV.										
22...	.08	14.8	18	[illegible]	47	.9	74	7.1	--	--
22... A	--	--	--	--	--	--	85	5.7	9.0	9.0
JAN.										
22...	.05	15.[illegible]	12	[illegible]	42	.6	53	6.0	--	--
22... A	--	--	--	--	--	--	56	6.2	9.5	11.0
MAR.										
15...	--	--	--	--	--	--	--	--	--	--
15... A	--	--	--	--	--	--	82	6.3	16.0	20.5
APR.										
18...	--	--	--	--	--	--	--	--	--	--
18... A	--	--	--	--	--	--	70	6.2	14.0	16.0
MAY										
17...	.08	25.1	14	[illegible]	56	1.1	81	6.4	--	--
17... A	--	--	--	--	--	--	80	6.5	14.0	20.5
JUNE										
27...	--	--	--	--	--	--	--	--	--	--
27... A	--	--	--	--	--	--	87	6.2	21.0	28.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)	TOTAL ALPHA (PC/L)	TOTAL ALPHA (COUNT-ING ERROR)	DIS-SOLVED ALPHA (PC/L)	DIS-SOLVED ALPHA (COUNT-ING ERROR)
OCT.										
19...	--	--	--	--	--	--	.4	.5	.2	.5
19... A	--	8.5	--	140	--	--	--	--	--	--
NOV.										
22...	5	--	3.6	--	.07	--	.0	.2	.0	.2
22... A	--	12.7	--	0	--	--	--	--	--	--
JAN.										
22...	15	--	29	--	.02	--	1.0	.4	.0	.2
22... A	--	10.8	--	350	--	--	--	--	--	--
MAR.										
15...	--	--	--	--	--	--	.0	.5	.0	.6
15... A	--	8.8	--	240	--	--	--	--	--	--
APR.										
18...	--	--	--	--	--	--	.0	.9	.0	.9
18... A	--	11.6	--	250	--	--	--	--	--	--
MAY										
17...	10	--	11	--	.07	40	.2	.8	.0	.8
17... A	--	9.6	9.6	--	--	--	--	--	--	--
JUNE										
27...	--	--	--	--	--	--	.7	1.5	.5	1.5
27... A	--	7.4	20	0	--	--	--	--	--	--

DATE	SUS-PENDED ALPHA (PC/L)	SUS-PENDED ALPHA (COUNT-ING ERROR)	TOTAL BETA (PC/L)	TOTAL BETA (COUNT-ING ERROR)	DIS-SOLVED BETA (PC/L)	DIS-SOLVED BETA (COUNT-ING ERROR)	SUS-PENDED BETA (PC/L)	SUS-PENDED BETA (COUNT-ING ERROR)	TOTAL STRON-TIUM 89 (PC/L)	TOTAL STRON-TIUM 90 (PC/L)
OCT.										
19...	.1	.2	1.9	.5	1.8	.4	.1	.2	<5.0	<1.0
19... A	--	--	--	--	--	--	--	--	--	--
NOV.										
22...	.0	.1	2.0	.4	1.8	.3	.2	.2	<5.0	<1.0
22... A	--	--	--	--	--	--	--	--	--	--
JAN.										
22...	1.0	.4	2.8	.5	1.7	.4	1.1	.3	<5.0	<1.0
22... A	--	--	--	--	--	--	--	--	--	--
MAR.										
15...	.0	.1	1.3	.4	1.3	.4	.0	.2	<5.0	<1.0
15... A	--	--	--	--	--	--	--	--	--	--
APR.										
18...	.0	.2	1.5	.4	1.4	.3	.1	.2	<5.0	<1.0
18... A	--	--	--	--	--	--	--	--	--	--
MAY										
17...	.2	.2	1.7	.4	1.3	.3	.4	.3	<5.0	<1.0
17... A	--	--	--	--	--	--	--	--	--	--
JUNE										
27...	.2	.2	1.4	.4	1.1	.4	.3	.2	<5.0	<1.0
27... A	--	--	--	--	--	--	--	--	--	--

02176912 CHATOOGA RIVER NEAR HIGHLANDS, N. C.

LOCATION.--Lat 35°00'57", long 83°07'36", Macon County, at bridge on Secondary Road 1603, upstream from Ammons Branch, and 4.7 miles southwest of Highlands.

DRAINAGE AREA.--22.9 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1969-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
18...	1100	112	6.1	0	.2	.6	1.0	.3	3	0
18... A	1100	112	--	--	--	--	--	--	--	--
FEB.										
22...	1200	76	5.6	0	.7	.2	.9	.3	4	0
22... A	1200	76	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
DEC.									
18...	2	1.2	1.6	.1	.00	.000	15	12	.02
18... A	--	--	--	--	--	--	--	--	--
FEB.									
22...	3	.4	1.4	.2	.00	.000	13	12	.02
22... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
18...	4.54	3	0	39	.3	11	6.0	--	--
18... A	--	--	--	--	--	--	7.4	2.0	3.0
FEB.									
22...	2.67	3	0	40	.2	14	5.9	--	--
22... A	--	--	--	--	--	--	7.7	4.0	2.0

DATE	COLO-(PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.						
18...	10	--	4.8	--	<10	.02
18... A	--	11.1	--	--	--	--
FEB.						
22...	5	--	8.1	<100	<10	.00
22... A	--	13.0	--	--	--	--

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
PAMLICO RIVER BASIN				
02081800 - CEDAR CREEK NEAR LOUISBURG N C (LAT 36 03 14 LONG 078 20 24)				
JUNE, 1973				
29...	0930	3050	362	2980
29...	1300	3270	446	3940
29...	1550	3630	336	3290
NEUSE RIVER BASIN				
02085070 - END RIVER NEAR DURHAM N C (LAT 36 04 20 LONG 078 54 30)				
FEB., 1973				
02...	1140	5520	1050	15600
02...	1713	8150	526	11600
02085220 - LITTLE RIVER NEAR ORANGE FACTORY N C (LAT 36 08 20 LONG 078 54 24)				
FEB., 1973				
02...	1215	5000	686	9260
02087000 - NEUSE RIVER NEAR NORTHSIDE N C (LAT 36 02 54 LONG 078 44 50)				
JUNE, 1973				
29...	1130	3260	687	6050
29...	1430	3680	472	4690
02087570 - NEUSE RIVER AT SMITHFIELD N C (LAT 35 30 46 LONG 078 21 00)				
DEC., 1972				
15...	1550	4180	210	2370
FEB., 1973				
02...	1410	3320	166	1490
02...	1700	4000	416	4490
03...	0930	6340	519	8880
03...	1135	6720	463	8400
05...	1003	13800	335	12500
05...	1210	13600	523	19200
06...	1330	10900	135	3970
APR.				
27...	1430	1830	381	1880
02088000 - MIDDLE CREEK NEAR CLAYTON N C (LAT 35 34 12 LONG 078 35 30)				
DEC., 1972				
15...	1435	506	54	74
FEB., 1973				
02...	1330	920	136	338
02...	1615	1930	326	1700
03...	0915	7000	208	3930
03...	1350	4640	128	1600
APR.				
27...	1330	253	134	92
27...	1530	273	110	81
02088470 - LITTLE RIVER NEAR KENLY N C (LAT 35 35 18 LONG 078 11 12)				
MAY , 1973				
29...	0945	265	160	114
29...	1330	273	379	279
02088500 - LITTLE RIVER NEAR PRINCETON N C (LAT 35 30 40 LONG 078 09 36)				
MAY , 1973				
29...	1030	442	266	317
29...	1415	456	166	204
02089000 - NEUSE RIVER NEAR GOLDSBORO N C (LAT 35 20 14 LONG 077 59 51)				
FEB., 1973				
03...	1055	6760	44	803
05...	1110	8350	386	8700
06...	1300	9580	90	2330
02089500 - NEUSE RIVER AT KINSTON N C (LAT 35 15 29 LONG 077 35 09)				
AUG., 1973				
28...	1425	1250	38	128

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)
NEUSE RIVER BASIN--Continued				
02090625 - TURNER SWAMP NEAR EUREKA N C (LAT 35 34 10 LONG 077 52 40)				
AUG., 1973				
21...	1120	.57	11	.02
02091000 - NAHUNTA SWAMP NEAR SHINE N C (LAT 35 29 20 LONG 077 48 22)				
MAY , 1973				
29...	1130	71	363	70
29...	1530	102	375	103
02091960 - CREEPING SWAMP NEAR CALICO N C (LAT 35 25 42 LONG 077 11 12)				
NOV., 1972				
16...	1430	.94	17	.04
17...	1530	4.2	8	.09
DEC.				
14...	1115	17	3	.14
FEB., 1973				
23...	1500	18	4	.19
MAR.				
19...	1215	6.8	13	.24
APR.				
02...	0915	464	30	38
05...	1045	11	21	.62
16...	1600	8.6	3	.07
MAY				
15...	1500	6.0	18	.29
JUNE				
13...	1330	19	26	1.3
21...	1415	1.6	97	.42
JULY				
16...	1200	.00	35	.00
AUG.				
21...	1445	.00	25	.00
SEP.				
03...	0945	.00	82	.00
02091970 - CREEPING SWAMP NEAR VANCEBORO N C (LAT 35 23 30 LONG 077 13 46)				
OCT., 1972				
13...	1000	.05	11	.00
NOV.				
16...	1400	1.2	16	.05
17...	1400	5.0	17	.23
DEC.				
14...	1045	31	5	.42
FEB., 1973				
23...	1400	42	3	.34
MAR.				
19...	1130	18	15	.73
APR.				
02...	0815	1310	59	209
06...	1305	129	15	5.2
08...	1415	180	40	19
09...	0215	216	23	13
09...	1415	225	26	16
10...	0215	216	14	8.2
11...	0945	129	15	5.2
16...	1500	23	6	.37
27...	2015	228	72	44
27...	2130	252	77	52
27...	2230	270	76	55
28...	0130	324	60	52
28...	1330	406	47	52
29...	2100	282	18	14
30...	0100	261	26	18
30...	0500	237	24	15
MAY				
01...	0400	132	17	6.1
14...	1415	18	19	.92
JUNE				
13...	1220	1.0	61	.16
15...	1430	2.1	86	.49
JULY				
16...	1100	.42	34	.04
21...	1330	19	110	5.6
23...	1000	40	95	10
AUG.				
21...	1400	.50	36	.05
SEP.				
17...	1330	.01	30	.00

INSTANTANEOUS SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

NEUSE RIVER BASIN--Continued

02092020 - PALMETTO SWAMP NEAR VANCEBORO N C (LAT 35 20 18 LONG 077 10 16)

DEC., 1972				
14...	1030	17	4	.18
FEB., 1973				
23...	1430	32	5	.43
MAR.				
19...	1200	15	25	1.0
APR.				
02...	0830	1420	74	284
16...	1530	19	12	.62
MAY				
15...	1430	1.4	16	.06
JUNE				
13...	1245	.06	16	.00
15...	1515	.05	14	.00
JULY				
16...	1130	.10	56	.02
AUG.				
21...	1420	.10	34	.01
SEP.				
17...	1345	.27	32	.02
29...	1045	.29	10	.01

CAPE FEAR RIVER BASIN

02098000 - NEW HOPE RIVER NEAR PITTSBORO N C (LAT 35 44 12 LONG 079 01 36)

MAY , 1973				
29...	1150	1060	352	1010

02102192 - BUCKHORN CREEK NEAR CORINTH N C (LAT 35 34 18 LONG 078 58 09)

DEC., 1972				
15...	1300	1400	329	1240
FEB., 1973				
02...	1200	2730	268	1980
02...	1530	4410	264	3140
05...	1010	188	27	14
APR.				
27...	1145	1020	113	311
27...	1630	1180	50	159
JUNE				
29...	1100	196	74	39
29...	1320	301	269	219
29...	1415	326	320	282
29...	1515	352	187	178

PEE DEE RIVER BASIN

02117030 - HUMPY CREEK NEAR FORK N C (LAT 35 51 17 LONG 080 26 24)

SEP., 1973				
06...	1120	.48	9	.01

TENNESSEE RIVER BASIN

03453500 - FRENCH BROAD RIVER AT MARSHALL N C (LAT 35 47 10 LONG 082 39 39)

SEP., 1973				
11...	1450	1620	107	468

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEARS OCTOBER 1971 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	SUS-PENDED SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT DIS-CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM
PAMLICO RIVER BASIN								
02081800 - CEDAR CREEK NEAR LDU158ÜRG N C (LAT 36 03 14 LDNG 078 20 24)								
OCT., 1971								
02...	1630	152	56	23	30	45	63	80
02082770 - SWIFT CREEK AT HILLIARDSTON N C (LAT 36 06 42 LONG 077 55 16)								
OCT., 1971								
02...	1300	340	117	107	35	51	65	75
02082950 - LITTLE FISHING CREEK NEAR WHITE OAK N C (LAT 36 11 LDNG 077 53)								
OCT., 1971								
02...	1330	696	151	284	58	70	82	91
NEUSE RIVER BASIN								
02085070 - ENO RIVER NEAR DURHAM N C (LAT 36 04 20 LDNG 078 54 30)								
MAY , 1972								
15...	1810	1250	219	727	21	34	48	56
16...	1025	2620	347	2460	45	50	68	84
FEB., 1973								
02...	1718	8150	526	11600	46	60	84	88
02085220 - LITTLE RIVER NEAR ORANGE FACTORY N C (LAT 36 08 20 LDNG 078 54 24)								
JUNE, 1972								
21...	1845	2890	272	2120	43	58	72	87
FEB., 1973								
02...	1700	5900	300	4780	48	70	81	88
02087570 - NEUSE RIVER AT SMITHFIELD N C (LAT 35 30 46 LDNG 078 21 00)								
MAY , 1972								
05...	1410	3100	318	2660	38	53	68	77
DEC.								
15...	1550	4180	210	2370	20	23	34	41
02091000 - NAHUNTA SWAMP NEAR SHINE N C (LAT 35 29 20 LDNG 077 48 22)								
OCT., 1971								
01...	1730	414	78	87	7	10	13	16

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEARS OCTOBER 1971 TO SEPTEMBER 1973

DATE	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
PAMLICO RIVER BASIN--Continued							
02081800 - CEDAR CREEK NEAR LOUISBURG N C (LAT 36 03 14 LONG 078 20 24)							
OCT., 1971							
02...	88	94	100	--	--	--	--
02082770 - SWIFT CREEK AT HILLIARDSTON N C (LAT 36 06 42 LONG 077 55 16)							
OCT., 1971							
02...	86	92	97	100	--	--	--
02082950 - LITTLE FISHING CREEK NEAR WHITE OAK N C (LAT 36 11 LONG 077 53)							
OCT., 1971							
02...	96	100	--	--	--	--	--
NEUSE RIVER BASIN--Continued							
02085070 - END RIVER NEAR DURHAM N C (LAT 36 04 20 LONG 078 54 30)							
MAY , 1972							
15...	62	66	91	96	98	100	--
16...	93	97	98	99	100	--	--
FEB., 1973							
02...	92	94	98	99	100	--	--
02085220 - LITTLE RIVER NEAR ORANGE FACTORY N C (LAT 36 08 20 LONG 078 54 24)							
JUNE, 1972							
21...	92	97	98	99	100	--	--
FEB., 1973							
02...	93	94	95	96	97	100	--
02087570 - NEUSE RIVER AT SMITHFIELD N C (LAT 35 30 46 LONG 078 21 00)							
MAY , 1972							
05...	91	94	97	98	99	100	--
DEC.							
15...	56	63	67	70	82	100	--
02091000 - NAHUNTA SWAMP NEAR SHINE N C (LAT 35 29 20 LONG 077 48 22)							
OCT., 1971							
01...	18	19	20	20	22	37	100

KANAWHA RIVER BASIN

03161000 SOUTH FORK NEW RIVER NEAR JEFFERSON, N. C.

LOCATION.--Lat 36°23'40", long 81°24'27", Ashe County, at gaging station on right bank 600 ft upstream from bridge on State Highways 16 and 88, 0.2 mile downstream from Bear Creek, and 4 miles southeast of Jefferson.

DRAINAGE AREA.--207 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1949 to September 1950, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1949 to September 1950.

EXTREMES.--1949-50:
Dissolved solids: Maximum, 36 mg/l Oct. 1-10, 1950.
Hardness: Maximum, 16 mg/l Nov. 21-30, 1949; minimum, 10 mg/l Jan. 21-31, Feb. 20-28, Mar. 1-10, 21-31, Sept. 1-10, 1950.
Water temperatures: Maximum, 27.0°C June 26, 1950; minimum, freezing point Feb. 27, 28, Mar. 2, 9, 1950.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1948-49, 1955-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
DEC.									
07...	1140	502	8.0	0	2.9	1.1	2.3	.9	13
07... A	1140	502	--	--	--	--	--	--	--
FEB.									
21...	1200	414	9.6	0	2.8	1.2	1.6	.6	12
21... A	1200	414	--	--	--	--	--	--	--

DATE	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.									
07...	0	11	1.4	3.7	.0	.50	.000	33	28
07... A	--	15	--	--	--	--	--	--	--
FEB.									
21...	0	10	2.2	3.0	.0	.50	.000	27	30
21... A	--	12	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)
DEC.									
7...	.04	44.7	12	1	28	.3	39	6.8	--
7... A	--	--	--	--	--	--	--	6.7	8.0
FEB.									
21...	.04	30.2	12	2	22	.2	34	6.5	--
21... A	--	--	--	--	--	--	--	6.4	3.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.					
07...	5	--	3.3	50	.03
07... A	--	10.9	--	--	--
FEB.					
21...	5	--	6.1	<10	.06
21... A	--	13.0	--	--	--

03162500 NORTH FORK NEW RIVER AT CRUMPLER, N. C.

LOCATION.--Lat 36°31'04", long 81°23'18", Ashe County, at bridge on State Highway 16 at Crumpler, and 6 miles upstream from South Fork.

DRAINAGE AREA.--277 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for water years 1952, 1954-59.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
26...	1355	720	9.8	0	2.5	2.2	2.7	.9	12	0
26... A	1355	720	--	--	--	--	--	--	--	--
MAR.										
14...	1515	740	10	0	3.7	1.2	3.2	.7	11	0
14... A	1515	740	--	--	--	--	--	--	--	--
MAY										
14...	1445	540	12	--	3.9	1.3	3.6	1.2	13	0
14... A	1445	540	--	--	--	--	--	--	--	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
26...	10	3.8	4.2	.0	--	1.0	--	.000	34	37
26... A	12	--	--	--	--	--	--	--	--	--
MAR.										
14...	9	5.0	2.9	.0	--	1.1	--	.000	35	37
14... A	10	--	--	--	--	--	--	--	--	--
MAY										
14...	11	3.4	3.0	.1	.7	--	.006	.029	38	35
14... A	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
26...	.05	66.1	15	5	26	.3	45	6.3	--	--
26... A	--	--	--	--	--	--	49	6.4	6.0	3.5
MAR.										
14...	.05	69.9	14	5	32	.4	45	6.4	--	--
14... A	--	--	--	--	--	--	42	6.6	14.0	26.5
MAY										
14...	.05	55.4	15	4	32	.4	51	6.4	--	--
14... A	--	--	--	--	--	--	56	6.4	15.0	18.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
26...	5	--	9.6	.08	--
26... A	--	7.3	--	--	--
MAR.					
14...	20	--	7.0	.00	--
14... A	--	9.1	--	--	--
MAY					
14...	5	--	8.3	.07	40
14... A	--	8.1	--	--	--

03162850 NEW RIVER AT AMELIA, N. C.

LOCATION.--Lat 36°33'08", long 81°11'00", Alleghany County, at bridge on Secondary Road 1345, 0.8 mile downstream from Rock Creek, and 1.3 miles northeast of Amelia.

DRAINAGE AREA.--820 sq mi, approximately.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
26... E	--	1750	11	0	3.0	1.8	2.2	.9	15	0
26... F,A	1005	1750	--	--	--	--	--	--	--	--
26... G,A	1055	1750	--	--	--	--	--	--	--	--
26... H,A	1110	1750	--	--	--	--	--	--	--	--
26... J,A	1140	1750	--	--	--	--	--	--	--	--
MAR.										
14... E	--	2120	10	0	3.3	1.2	2.5	.8	12	0
14... F,A	0905	2120	--	--	--	--	--	--	--	--
14... G,A	1005	2120	--	--	--	--	--	--	--	--
14... H,A	1025	2120	--	--	--	--	--	--	--	--
14... J,A	1050	2120	--	--	--	--	--	--	--	--
MAY										
14... F	0930	2000	10	--	2.7	1.2	2.4	.9	11	0
14... A	0930	2000	--	--	--	--	--	--	12	0
14... G	1100	2000	10	--	3.1	1.2	2.5	1.1	13	0
14... A	1100	2000	--	--	--	--	--	--	12	0
14... H	1140	2000	10	--	3.4	1.2	2.8	1.1	14	0
14... A	1140	2000	--	--	--	--	--	--	14	0
14... J	1220	2000	10	--	2.9	1.2	2.8	1.1	11	0
14... A	1220	2000	--	--	--	--	--	--	14	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
26... E	12	3.8	3.1	.1	--	.70	--	.000	35	36
26... F,A	12	--	--	--	--	--	--	--	--	--
26... G,A	12	--	--	--	--	--	--	--	--	--
26... H,A	11	--	--	--	--	--	--	--	--	--
26... J,A	13	--	--	--	--	--	--	--	--	--
MAR.										
14... E	10	5.2	2.5	.0	--	.36	--	.000	35	34
14... F,A	12	--	--	--	--	--	--	--	--	--
14... G,A	12	--	--	--	--	--	--	--	--	--
14... H,A	10	--	--	--	--	--	--	--	--	--
14... J,A	12	--	--	--	--	--	--	--	--	--
MAY										
14... F	9	3.3	1.8	.1	.4	--	.007	.010	30	30
14... A	10	--	--	--	--	--	--	--	--	--
14... G	11	3.6	1.9	.1	.4	--	.006	.010	33	30
14... A	10	--	--	--	--	--	--	--	--	--
14... H	11	2.5	2.0	.1	.4	--	.007	.010	33	32
14... A	11	--	--	--	--	--	--	--	--	--
14... J	9	2.5	1.7	.1	.3	--	.006	.010	33	29
14... A	11	--	--	--	--	--	--	--	--	--

A Field analysis.
E Composite
F Sample collected 50 ft from left bank.
G Sample collected 130 ft from left bank.
H Sample collected 250 ft from left bank.
J Sample collected 350 ft from left bank.

03162850 NEW RIVER AT AMELIA, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
26...E	.05	165	15	3	23	.2	42	6.5	--	--
26...F,A	--	--	--	--	--	--	45	7.1	7.0	7.5
26...G,A	--	--	--	--	--	--	46	6.2	7.0	6.0
26...H,A	--	--	--	--	--	--	45	6.1	7.0	5.5
26...J,A	--	--	--	--	--	--	46	6.7	7.0	5.0
MAR.										
14...E	.05	200	13	3	25	.3	41	6.3	--	--
14...F,A	--	--	--	--	--	--	44	6.4	12.0	15.5
14...G,A	--	--	--	--	--	--	44	6.5	12.0	15.5
14...H,A	--	--	--	--	--	--	<40	6.5	12.0	17.5
14...J,A	--	--	--	--	--	--	44	6.3	12.0	21.0
MAY										
14...F	.04	162	12	5	29	.3	43	6.5	--	--
14...A	--	--	--	--	--	--	48	5.6	14.5	14.0
14...G	.04	176	12	2	28	.3	42	6.8	--	--
14...A	--	--	--	--	--	--	41	6.3	15.5	16.0
14...H	.04	178	13	2	29	.3	42	6.4	--	--
14...A	--	--	--	--	--	--	43	6.4	15.5	20.0
14...J	.04	178	12	2	31	.3	42	6.4	--	--
14...A	--	--	--	--	--	--	<40	6.0	16.0	20.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
DEC.					
26...E	10	--	7.5	.07	--
26...F,A	--	10.4	--	--	--
26...G,A	--	10.5	--	--	--
26...H,A	--	10.5	--	--	--
26...J,A	--	10.2	--	--	--
MAR.					
14...E	25	--	9.6	.00	--
14...F,A	--	9.2	--	--	--
14...G,A	--	9.3	--	--	--
14...H,A	--	9.3	--	--	--
14...J,A	--	9.5	--	--	--
MAY					
14...F	10	--	5.6	.09	30
14...A	--	8.3	19	--	--
14...G	5	--	3.3	.10	30
14...A	--	8.2	9.6	--	--
14...H	5	--	8.9	.08	30
14...A	--	8.2	8.9	--	--
14...J	5	--	7.0	.06	30
14...A	--	8.2	22	--	--

A Field analysis.
E Composite.
F Sample collected 50 ft from left bank.
G Sample collected 130 ft from left bank.
H Sample collected 250 ft from left bank.
J Sample collected 350 ft from left bank.

03439000 FRENCH BROAD RIVER AT ROSMAN, N. C.

LOCATION.--Lat 35°08'32", long 82°49'28", Transylvania County, at gaging station on left bank at upstream side of bridge on U.S. Highway 178 at Rosman, 1 mile upstream from East Fork, and at mile 216.4.

DRAINAGE AREA.--67.9 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1967, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1968 to April 1972.

EXTREMES.--1969-72:
Water temperatures: Maximum, 24.0°C July 16, 1970; minimum, freezing point on many days during winter months.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1948, 1955-57. Daily records published in 1946 for site 0.7 mile upstream.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
DEC.											
07...	1030	314	6.2	0	.9	.7	1.2	.3	8	0	7
07...A	1030	314	--	--	--	--	--	--	--	--	--
FEB.											
22...	1040	310	5.2	0	.7	.3	.7	.4	5	0	4
22...A	1040	310	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.										
07...	.5	1.2	.3	.00	<.05	<.05	<.10	.000	20	15
07...A	--	--	--	.00	--	--	--	--	--	--
FEB.										
22...	.2	1.0	.0	.00	--	--	--	.000	15	11
22...A	--	--	--	.00	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
07...	.03	17.0	5	1	32	.2	14	5.8	--	--
07...A	--	--	--	--	--	--	--	6.1	9.0	5.0
FEB.										
22...	.02	12.5	3	0	30	.2	13	6.0	--	--
22...A	--	--	--	--	--	--	--	7.3	4.0	2.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.					
07...	5	--	20	10	.00
07...A	--	11.3	--	--	--
FEB.					
22...	8	--	8.6	<10	.00
22...A	--	12.3	--	--	--

03443000 FRENCH BROAD RIVER AT BLANTYRE, N. C.

LOCATION.--Lat 35°17'56", long 82°37'27", Transylvania County, at gaging station on left bank 40 ft upstream from bridge on Secondary Road 1503, 700 ft east of railroad at Blantyre, 3.5 miles downstream from Little River, and at mile 183.7.

DRAINAGE AREA.--296 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1953, October 1957 to September 1967, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1952 to September 1953.

EXTREMES.--1952-53:
Dissolved solids: Maximum, 202 mg/l Oct. 21-31, 1952; minimum, 44 mg/l Mar. 22-31, 1953.
Hardness: Maximum, 27 mg/l Oct. 1-10, 1952; minimum, 9 mg/l May 2-4, June 7, July 23, 1953.
Water temperatures: Maximum, 26.0°C Sept. 4, 1953; minimum, freezing point Dec. 30, 31, 1952.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1948, 1955-57.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
DEC.											
07...	1250	1310	7.1	6	4.5	1.0	10	.7	14	0	11
07... A	1250	1310	--	--	--	--	--	--	--	--	--
FEB.											
22...	1400	1270	8.5	0	5.2	.4	8.7	.5	16	0	13
22... A	1400	1270	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
DEC.											
07...	21	3.6	.0	.20	.16	<.05	.30	2.0	.060	56	56
07... A	--	--	--	--	--	--	--	--	--	--	--
FEB.											
22...	17	3.4	.0	.00	--	--	--	--	.000	50	52
22... A	--	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.										
07...	.08	198	15	4	57	1.1	80	6.0	--	--
07... A	--	--	--	--	--	--	--	6.2	12.0	8.0
FEB.										
22...	.07	171	15	2	55	1.0	82	6.2	--	--
22... A	--	--	--	--	--	--	--	7.4	6.0	4.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.						
07...	10	--	4.8	22	40	.08
07... A	--	9.0	--	--	--	--
FEB.						
22...	10	--	--	15	<10	.02
22... A	--	10.3	--	--	--	--

03448000 FRENCH BROAD RIVER AT BENT CREEK, N. C.

LOCATION.--Lat 35°37'07", long 82°35'35", Buncombe County, temperature recorder on right bank opposite gaging station, 50 ft downstream from Bent Creek, 0.5 mile southeast of village of Bent Creek, 6.2 miles upstream from Hominy Creek, 6.7 miles south of Asheville, and at mile 157.7.

DRAINAGE AREA.--676 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1967, water years 1971-72 (partial-record station). Water temperatures: October 1968 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 23.5°C Sept. 2, 3; minimum, 1.5°C Jan. 14.

Period of record:
Water temperatures: Maximum, 25.5°C July 17, 1970; minimum, freezing point on several days during most winters.

REMARKS.--Miscellaneous chemical data published for water years 1955-57. Samples for the 1972 water year were collected by USGS personnel 3.0 miles upstream at Long Shoals bridge (03447861 French Broad River near Arden), and the analyses were made and furnished by the Tennessee Valley Authority. Chemical data published for Long Shoals bridge for 1954 water year. Temperature data for current year were furnished by the Tennessee Valley Authority.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	16.0	14.5	12.0	8.0	6.0	11.0	10.0	5.5	4.5	9.5	8.0
2	16.5	15.0	15.0	14.0	7.0	6.0	10.5	9.5	8.0	5.5	9.0	8.5
3	16.5	14.0	16.0	15.0	7.0	5.5	9.5	8.5	8.0	7.0	9.0	8.5
4	16.0	14.5	16.0	15.0	7.0	6.0	8.0	7.0	7.0	6.0	10.5	9.0
5	15.5	14.5	15.0	13.5	9.0	7.0	8.0	8.0	8.0	6.5	11.5	10.5
6	16.0	15.0	13.5	11.5	11.0	9.0	8.0	7.0	8.0	8.0	11.5	11.0
7	16.0	15.0	11.5	11.0	10.5	9.5	7.0	5.5	8.5	8.0	11.0	10.5
8	16.0	13.5	11.0	10.0	9.5	9.0	5.5	4.0	8.5	8.0	11.5	10.5
9	16.0	14.0	11.0	10.0	10.0	9.0	4.0	3.5	8.0	6.0	11.5	11.5
10	16.0	14.0	11.5	10.0	11.5	10.0	4.5	3.5	6.0	4.0	11.5	11.0
11	15.5	13.5	12.0	10.5	12.0	11.5	4.5	3.5	4.5	3.5	11.5	11.0
12	15.5	13.0	11.5	10.5	12.0	11.0	3.5	2.0	4.5	4.0	12.0	11.0
13	16.5	14.5	11.0	10.5	12.0	11.0	3.5	2.0	5.5	4.0	12.0	11.5
14	17.0	15.0	11.5	11.0	12.0	11.5	3.5	1.5	6.0	5.0	12.0	11.0
15	17.0	15.0	11.5	10.0	11.5	9.5	4.5	3.0	6.0	5.5	13.5	12.0
16	15.5	14.5	10.0	8.5	9.5	6.5	5.0	4.0	6.0	5.0	13.5	13.0
17	18.0	15.0	8.5	8.0	6.5	4.5	5.5	4.5	5.0	4.0	13.5	11.0
18	15.5	14.5	8.5	7.0	4.5	4.5	6.0	4.5	4.0	3.5	10.5	8.5
19	14.5	12.0	8.5	8.0	4.5	4.5	8.0	5.5	4.5	3.5	10.0	8.0
20	13.5	11.0	8.0	8.0	6.5	4.5	8.0	6.5	5.0	4.5	9.5	9.0
21	11.5	9.5	8.5	8.0	8.5	6.5	6.5	6.0	5.5	4.5	9.5	9.0
22	12.0	9.0	8.5	7.0	9.5	8.5	6.5	5.5	5.5	4.0	9.0	8.0
23	12.0	10.5	7.0	6.5	10.0	9.5	7.0	6.0	6.0	4.5	9.0	8.5
24	15.0	12.0	6.5	5.5	10.0	10.0	7.0	6.0	6.5	5.0	9.5	9.0
25	13.5	13.0	6.0	5.5	10.0	9.5	6.0	5.5	7.0	5.5	9.5	9.0
26	13.5	13.0	6.0	5.0	9.5	8.0	6.0	5.5	8.0	6.5	9.5	9.0
27	13.0	11.5	6.5	5.5	8.0	6.5	8.0	6.0	9.0	8.0	10.5	9.5
28	12.0	11.5	7.0	6.0	7.0	6.0	8.0	8.0	9.5	8.5	10.5	10.5
29	13.0	12.0	7.0	6.5	6.5	6.0	8.0	5.5	---	---	10.5	9.5
30	14.0	13.0	6.5	6.5	8.0	6.5	5.5	5.0	---	---	10.5	9.5
31	13.5	13.0	---	---	10.0	8.0	5.0	4.5	---	---	11.5	10.5
MONTH	18.0	9.0	16.0	5.0	12.0	4.5	11.0	1.5	9.5	3.5	13.5	8.0

03448000 FRENCH BROAD RIVER AT BENT CREEK, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	11.5	15.0	13.0	17.0	15.5	19.0	18.0	20.0	19.0	23.0	20.5
2	13.0	12.0	14.5	14.5	16.0	15.5	20.5	19.0	20.0	19.0	23.5	20.5
3	13.0	11.5	14.5	14.5	17.0	16.0	21.0	19.0	21.0	19.0	23.5	20.0
4	13.5	12.0	14.5	13.5	18.0	16.5	21.0	19.5	21.0	19.5	22.0	20.0
5	13.0	11.0	14.0	13.0	18.5	17.0	20.5	19.5	21.5	20.0	23.0	20.5
6	11.0	10.0	13.5	12.0	17.0	16.5	21.5	19.5	21.0	19.5	22.0	20.0
7	11.0	9.5	13.5	12.0	17.0	16.0	21.5	19.5	21.5	20.0	23.0	20.0
8	10.0	9.5	13.0	13.5	18.5	16.5	20.5	20.0	21.5	19.5	21.5	20.5
9	10.0	10.0	14.5	13.5	18.5	18.0	21.0	19.5	21.0	19.5	21.5	20.5
10	10.0	8.5	15.0	14.5	19.0	17.0	21.5	19.5	22.0	20.0	22.0	19.5
11	8.5	8.0	15.5	15.0	19.0	18.0	22.0	20.0	22.0	20.0	23.0	20.0
12	8.5	8.5	15.5	15.0	19.5	18.5	22.0	20.0	21.5	20.0	22.0	19.5
13	10.0	8.5	15.5	14.5	19.5	18.5	22.0	19.5	23.0	20.0	20.5	19.5
14	10.5	9.5	15.0	14.0	19.0	18.0	21.0	19.5	21.0	20.0	20.0	19.0
15	11.0	9.5	14.5	13.5	18.5	18.0	20.5	19.5	22.0	20.0	20.5	19.0
16	11.0	10.5	14.5	13.0	18.5	18.0	20.5	20.0	22.0	20.0	21.0	18.5
17	11.0	10.5	14.0	13.0	19.5	18.0	20.5	20.0	20.5	19.0	20.0	19.0
18	11.0	11.0	13.5	12.0	19.5	18.5	20.0	19.5	20.5	19.0	20.0	18.5
19	12.0	11.0	13.5	12.0	19.5	18.5	20.5	19.0	20.5	19.0	20.0	18.0
20	13.0	11.5	14.5	13.0	19.5	18.5	20.5	19.0	20.5	19.5	19.5	17.0
21	14.5	13.0	15.5	13.5	19.0	18.5	21.0	19.5	20.0	19.0	20.0	17.0
22	15.0	14.0	16.5	13.5	18.5	18.0	21.5	19.5	19.5	18.5	20.0	18.5
23	15.0	14.5	17.0	15.0	19.0	18.0	21.5	20.0	20.5	18.5	21.5	19.0
24	14.5	14.5	17.0	16.0	19.5	18.0	20.0	19.5	21.0	18.5	21.5	19.5
25	14.5	14.0	16.5	16.0	19.0	18.0	20.0	19.0	20.5	19.0	20.0	19.5
26	14.5	14.0	17.0	15.5	19.5	18.0	20.0	19.0	21.5	19.0	19.5	19.0
27	14.0	13.0	15.5	15.5	19.0	18.0	20.0	19.5	22.0	19.5	19.0	19.0
28	13.0	11.5	18.0	16.0	18.5	18.0	20.5	19.5	22.0	19.5	20.5	18.5
29	11.5	11.0	18.5	16.5	19.0	18.0	21.5	19.5	23.0	20.0	21.0	19.0
30	13.0	11.5	19.0	17.0	19.0	18.0	21.0	19.5	23.0	20.0	20.0	19.5
31	---	---	19.0	16.5	---	---	20.5	19.5	23.0	20.5	---	---
MONTH	15.0	8.0	19.0	12.0	19.5	15.5	22.0	18.0	23.0	18.5	23.5	17.0
YEAR	23.5	1.5										

TENNESSEE RIVER BASIN

03451500 FRENCH BROAD RIVER AT ASHEVILLE, N. C.

LOCATION.--Lat 35°36'32", long 82°34'41", Buncombe County, at gaging station on right bank 27 ft upstream from Pearson Bridge at Asheville, 2.3 miles downstream from Southern Railway station, 3.2 miles downstream from Swannanoa River, and at mile 145.8.

DRAINAGE AREA.--945 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1950 to September 1951, October 1956 to September 1967, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1950 to September 1951.

EXTREMES.--1950-51:
Dissolved solids: Maximum, 157 mg/l Sept. 12, 1951; minimum, 42 mg/l Apr. 1-10, 1951.
Hardness: Maximum, 32 mg/l Sept. 6, 1951; minimum, 10 mg/l Mar. 21-31, Apr. 1-10, 1951.
Water temperatures: Maximum, 26.0°C June 18, 1951; minimum, freezing point Nov. 25, 26, Dec. 11, 16, 1950, Jan. 8, 1951.

REMARKS.--Miscellaneous chemical data published for water years 1944-45, 1948, 1955-56.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO_2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO_3) (MG/L)	CAR-BONATE (CO_3) (MG/L)
DEC.										
05...	1600	1660	8.7	0	5.1	1.3	12	.9	20	0
05... A	1600	1660	--	--	--	--	--	--	--	--
FEB.										
22...	1600	2470	8.9	0	4.2	.8	8.3	.7	16	0
22... A	1600	2470	--	--	--	--	--	--	--	--

03451500 FRENCH BROAD RIVER AT ASHEVILLE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)
DEC.									
05...	16	21	6.0	.0	.00	.000	68	65	.09
05... A	--	--	--	--	--	--	--	--	--
FEB.									
22...	13	15	3.9	.0	.30	.000	51	51	.07
22... A	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
DEC.									
05...	305	18	2	58	1.2	102	6.0	--	--
05... A	--	--	--	--	--	--	6.1	9.0	20.0
FEB.									
22...	340	14	1	55	1.0	78	6.1	--	--
22... A	--	--	--	--	--	--	7.2	5.0	5.0

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
DEC.					
05...	5	--	32	130	.00
05... A	--	9.6	--	--	--
FEB.					
22...	80	--	20	<10	.07
22... A	--	11.4	--	--	--

TENNESSEE RIVER BASIN

03454757 FRENCH BROAD RIVER BELOW HOT SPRINGS, N. C.

LOCATION.--Lat 35°55'14", long 82°57'33", Cocke County, Tenn., at Wolf Creek Bridge on U.S. Highways 25 and 70, 0.2 mile above Bryant Hollow, 6.0 miles downstream from Tennessee-North Carolina State line, and 7.6 miles northwest of Hot Springs.

DRAINAGE AREA.--1,712 sq mi.

PERIOD OF RECORD.--October 1969 to July 1973 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT.										
24...	1300	1350	--	--	--	--	--	--	--	--
24... A	1300	1350	--	--	--	--	--	--	--	--
NOV.										
14...	1300	3920	10	0	5.9	1.6	11	1.5	22	0
14... A	1300	3920	--	--	--	--	--	--	--	--
JAN.										
16...	1315	2690	11	1	5.3	1.3	9.5	1.1	17	0
16... A	1315	2690	--	--	--	--	--	--	--	--
MAR.										
28...	1230	5360	9.3	0	3.8	1.0	4.4	.9	14	0
28... A	1230	5360	--	--	--	--	--	--	--	--
APR.										
26...	1245	5410	--	--	--	--	--	--	--	--
26... A	1245	5410	--	--	--	--	--	--	--	--
MAY										
16...	1400	3940	10	--	4.5	1.2	8.2	1.1	15	0
16... A	1400	3940	--	--	--	--	--	--	20	0
JUNE										
27...	1330	2640	--	--	--	--	--	--	--	--
27... A	1330	2640	--	--	--	--	--	--	16	0
JULY										
25...	1300	2140	--	--	--	--	--	--	--	--
25... A	1300	2140	--	--	--	--	--	--	23	--

03454757 FRENCH BROAD RIVER BELOW HOT SPRINGS, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
24...	--	--	--	--	--	--	--	--	--	--
24... A	25	--	--	--	--	--	--	--	--	--
NOV.										
14...	18	19	4.5	.3	--	.70	--	.000	66	68
14... A	20	--	--	--	--	--	--	--	--	--
JAN.										
16...	14	17	4.2	.1	--	.43	--	.024	60	59
16... A	19	--	--	--	--	--	--	--	--	--
MAR.										
28...	11	6.8	3.5	.1	--	.60	--	.063	44	40
28... A	12	--	--	--	--	--	--	--	--	--
APR.										
26...	--	--	--	--	--	--	--	--	--	--
26... A	23	--	--	--	--	--	--	--	--	--
MAY										
16...	12	13	3.5	.2	.3	--	.005	.030	53	49
16... A	16	--	--	--	--	--	--	--	--	--
JUNE										
27...	--	--	--	--	--	--	--	--	--	--
27... A	13	--	--	--	--	--	--	--	--	--
JULY										
25...	--	--	--	--	--	--	--	--	--	--
25... A	19	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.										
4...	--	--	--	--	--	--	--	--	--	--
24... A	--	--	--	--	--	--	125	7.9	14.0	19.0
NOV.										
14...	.09	699	21	3	51	1.0	97	6.7	--	--
14... A	--	--	--	--	--	--	105	7.2	12.0	15.1
JAN.										
16...	.08	436	19	5	51	1.0	91	6.1	--	--
16... A	--	--	--	--	--	--	110	7.9	3.5	17.0
MAR.										
28...	.06	637	14	2	39	.5	54	6.4	--	--
28... A	--	--	--	--	--	--	58	7.1	12.2	13.6
APR.										
26...	--	--	--	--	--	--	--	--	--	--
26... A	--	--	--	--	--	--	80	7.2	20.5	33.0
MAY										
16...	.07	564	16	4	50	.9	79	6.7	--	--
16... A	--	--	--	--	--	--	66	6.6	15.5	20.5
JUNE										
27...	--	--	--	--	--	--	--	--	--	--
27... A	--	--	--	--	--	--	80	7.9	22.5	24.5
JULY										
25...	--	--	--	--	--	--	--	--	--	--
25... A	--	--	--	--	--	--	90	6.8	25.0	32.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.								
24...	--	--	--	--	--	--	.03	--
24... A	--	10.1	--	--	3800	--	--	--
NOV.								
14...	5	--	3.4	7.0	--	--	.06	--
14... A	--	11.1	--	--	7800	--	--	--
JAN.								
16...	10	--	3.9	22	--	--	.04	--
16... A	--	12.1	--	--	3500	--	--	--
MAR.								
28...	20	--	.9	3.9	--	--	.00	--
28... A	--	10.0	--	--	10500	--	--	--
APR.								
26...	--	--	3.6	--	--	--	--	--
26... A	--	8.2	--	--	11200	--	--	--
MAY								
16...	10	--	1.6	4.8	--	--	.26	60
16... A	--	10.4	--	8.0	1100	--	--	--
JUNE								
27...	--	--	2.0	--	--	--	.00	--
27... A	--	7.9	--	.3	5900	--	--	--
JULY								
25...	--	--	1.3	--	--	--	--	--
25... A	--	7.6	--	5.8	7300	--	--	--

03457000 PIGEON RIVER AT CANTON, N. C.

LOCATION.--Lat 35°31'30", long 82°50'28", Haywood County, at gaging station on left bank 100 ft upstream from small tributary, 200 ft downstream from Pigeon Street Bridge, 0.5 mile upstream from U.S. Highways 19 and 23 at Canton, and at mile 64.1.

DRAINAGE AREA.--133 sq mi. approximately.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1967, water years 1968-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for water years 1945, 1949, 1954-57.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
18...	1500	560	6.6	0	.9	1.1	1.3	.6	5	0
18... A	1500	560	--	--	--	--	--	--	--	--
FEB.										
15...	1600	1160	6.5	0	1.5	.5	.9	.5	7	0
15... A	1600	1160	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
DEC.									
18...	4	3.0	1.1	.0	.06	.000	18	18	.02
18... A	--	--	--	--	--	--	--	--	--
FEB.									
15...	6	1.4	1.4	.0	.20	.000	13	17	.02
15... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
18...	28.2	7	3	27	.2	19	5.9	--	--
18... A	--	--	--	--	--	--	7.8	3.0	10.0
FEB.									
15...	41.4	6	0	23	.2	21	6.0	--	--
15... A	--	--	--	--	--	--	6.4	3.0	3.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.					
18...	5	--	10	20	.04
18... A	--	11.9	--	--	--
FEB.					
15...	8	--	11	<10	.03
15... A	--	10.9	--	--	--

03459000 JONATHAN CREEK NEAR COVE CREEK, N. C.

LOCATION.--Lat 35°37'22", long 83°00'26", Haywood County, at gaging station on left bank on Secondary Road 1338, 1,500 ft downstream from ford, 0.7 mile upstream from mouth, and 2 miles downstream from Cove Creek and village of Cove Creek.

DRAINAGE AREA.--65.3 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1971-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for water years 1945, 1949, 1954-67. Analyses for the 1973 water year furnished by the Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
02...	1315	72	10	130	2.6	1.0	2.0	1.3	12	0
02... A	1315	72	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (P04) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
02...	10	2.9	3.0	.18	<.010	<.01	.19	.15	38	30
02... A	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
02...	.05	7.39	10	0	26	.3	38	6.9	--	5	2.4
02... A	--	--	--	--	--	--	--	--	13.0	--	--

TENNESSEE RIVER BASIN

03459620 PIGEON RIVER AT HEPCO, N. C.

LOCATION.--Lat 35°39'53", long 82°59'30", Haywood County, at bridge on Interstate Highway 40 at Hepco, 0.1 mile upstream from Fines Creek, 2.2 miles downstream from gaging station, and at mile 42.9.

DRAINAGE AREA.--356 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

REMARKS.--Records of discharge are given for 03459500 Pigeon River near Hepco.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
18...	1330	1270	14	0	9.2	2.5	9.7	1.6	18	0
18... A	1330	1270	--	--	--	--	--	--	--	--
FEB.										
15...	1400	1170	12	0	8.8	2.2	10	1.3	18	0
15... A	1400	1170	--	--	--	--	--	--	--	--

03459620 PIGEON RIVER AT HEPCO, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
DEC.									
18...	15	11	17	.1	1.4	.000	86	81	.12
18... A	--	--	--	--	--	--	--	--	--
FEB.									
15...	15	11	18	.1	1.1	.000	81	78	.11
15... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
18...	295	34	19	37	.7	120	6.0	--	--
18... A	--	--	--	--	--	--	7.5	4.0	8.0
FEB.									
15...	256	31	16	40	.8	123	6.6	--	--
15... A	--	--	--	--	--	--	7.3	8.0	.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.					
18...	15	--	29	100	.15
18... A	--	11.5	--	--	--
FEB.					
15...	20	--	7.2	200	.06
15... A	--	9.8	--	--	--

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.
(Hydrologic bench-mark and pesticide station)

LOCATION.--Lat 35°40'02", long 83°04'23", Haywood County, in Great Smoky Mountains National Park, temperature recorder at gaging station on left bank 20 ft downstream from bridge on State Highway 284, 500 ft upstream from Little Cataloochee Creek, 2 miles north of Cataloochee, and 3.7 miles upstream from mouth.

DRAINAGE AREA.--49.2 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1962 to September 1971, water years 1972-73 (partial-record station). Water temperatures: October 1962 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 19.5°C Aug. 3; minimum, freezing point on several days during January and February.

Period of record:
Water temperatures: Maximum, 20.5°C June 22, 1964; minimum, freezing point on several days during winter months of most years.

REMARKS.--Miscellaneous chemical data published for 1945 water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON IN BOTTOM DE-POSITS (UG/G)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MANGA-NESE IN BOTTOM DE-POSITS (UG/G)	DIS-SOLVED CAL-CIUM (CA) (MG/L)
OCT.										
03...	1200	76	7.9	--	0	--	--	--	--	1.1
03... A	1200	76	--	--	--	--	--	--	--	--
NOV.										
16...	1000	110	7.4	--	0	--	--	--	--	1.0
16... A	1000	110	--	--	--	--	--	--	--	--
JAN.										
15...	1200	115	6.2	--	211	--	--	0	--	.8
15... A	1200	115	--	--	--	--	--	--	--	--
MAY										
17...	1100	114	7.0	--	--	--	--	--	--	1.2
17... A	1100	114	--	--	--	--	--	--	--	--
JUNE										
28...	1130	114	7.2	--	--	--	--	--	--	1.3
28... A	1130	114	--	--	--	--	--	--	--	--
SEP.										
12...	0915	49	9.1	80	50	5900	0	0	200	1.2
12... A	0915	49	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)
OCT.									
03...	.7	1.2	.4	6	0	5	.2	.8	.1
03... A	--	--	--	--	--	6	--	--	--
NOV.									
16...	.3	1.0	.6	5	0	4	.6	.4	.1
16... A	--	--	--	--	--	6	--	--	--
JAN.									
15...	.3	1.0	.6	6	0	5	.4	.5	.0
15... A	--	--	--	--	--	--	--	--	--
MAY									
17...	.3	1.0	.6	5	0	4	.9	1.0	.1
17... A	--	--	--	4	0	3	--	--	--
JUNE									
28...	.4	1.1	.6	5	0	4	.8	.5	.1
28... A	--	--	--	8	0	7	--	--	--
SEP.									
12...	.4	1.3	1.6	9	0	7	2.4	.9	.1
12... A	--	--	--	10	--	8	--	--	--

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (NO3) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)
OCT.									
03...	.2	--	--	--	--	--	--	--	.00
03... A	--	--	--	--	--	--	--	--	--
NOV.									
16...	.1	--	--	--	--	--	--	--	.00
16... A	--	--	--	--	--	--	--	--	--
JAN.									
15...	.00	.00	--	--	--	--	--	--	.00
15... A	--	--	--	--	--	--	--	--	--
MAY									
17...	.02	--	.00	--	--	--	--	--	.01
17... A	--	--	--	--	--	--	--	--	--
JUNE									
28...	.09	--	.00	--	--	--	--	--	--
28... A	--	--	--	--	--	--	--	--	--
SEP.									
12...	--	--	--	.11	.9	.15	.26	1.2	.00
12... A	--	--	--	--	--	--	--	--	--

DATE	TOTAL PHOS-PHORUS IN BOT-TOM DE-POSITS (MG/KG)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	TOTAL FILT-RABLE RESIDUE (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)
OCT.									
03...	--	20	19	17	.03	4.10	<1	6	1
03... A	--	--	--	--	--	--	--	--	--
NOV.									
16...	--	13	--	14	.02	3.86	--	4	0
16... A	--	--	--	--	--	--	--	--	--
JAN.									
15...	--	13	--	13	.02	4.04	--	3	0
15... A	--	--	--	--	--	--	--	--	--
MAY									
17...	--	12	--	15	.02	3.69	--	4	0
17... A	--	--	--	--	--	--	--	--	--
JUNE									
28...	--	14	--	14	.02	4.31	--	5	1
28... A	--	--	--	--	--	--	--	--	--
SEP.									
12...	41	21	--	22	.03	2.49	--	5	0
12... A	--	--	--	--	--	--	--	--	--

DATE	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (JTU)	DIS-SOLVED OXYGEN (MG/L)
OCT.									
03...	30	.2	17	6.4	--	--	0	--	--
03... A	--	--	15	7.8	9.0	10.0	--	--	11.7
NOV.									
16...	33	.2	14	5.5	--	--	0	--	--
16... A	--	--	14	6.8	4.4	3.9	--	--	11.7
JAN.									
15...	35	.2	14	6.0	--	--	5	--	--
15... A	--	--	15	7.1	1.5	4.0	--	--	8.0
MAY									
17...	30	.2	14	6.2	--	--	5	--	--
17... A	--	--	7	4.9	8.0	9.0	--	--	11.6
JUNE									
28...	30	.2	16	6.3	--	--	10	--	--
28... A	--	--	11	6.7	14.5	19.0	--	--	9.6
SEP.									
12...	30	.3	19	7.2	14.0	--	--	2	--
12... A	--	--	<50	5.9	14.0	12.0	--	--	10.0

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOL-VED ORGANIC CARBON (C) (MG/L)	ORGANIC CARBON IN BED MA-TERIAL (C) (G/KG)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	TOTAL ARSENIC (AS) (UG/L)
OCT.								
03...	1.0	3.8	--	--	--	--	.02	--
03... A	--	--	8	--	--	--	--	--
NOV.								
16...	--	25	--	--	--	--	.00	--
16... A	--	--	7	--	--	--	--	--
JAN.								
15...	1.0	9.6	--	--	--	--	.02	--
15... A	--	--	8	--	--	--	--	--
MAY								
17...	.1	5.0	--	--	--	--	.11	--
17... A	--	81	10	--	--	--	--	--
JUNE								
28...	.8	4.0	--	--	--	--	--	--
28... A	--	2.6	25	--	--	--	--	--
SEP.								
12...	.8	.9	--	2.0	.5	3.8	--	2
12... A	--	20	7	--	--	--	--	--

DATE	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC IN BOTTOM DE-POSITS (UG/G)	DIS-SOLVED BARIUM (BA) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CAD-MIUM (CD) (UG/L)	DIS-SOLVED CAD-MIUM (CD) (UG/L)	TOTAL CADMIUM IN BOTTOM DE-POSITS (UG/G)	TOTAL CHRO-MIUM (CR) (UG/L)	DIS-SOLVED CHRO-MIUM (CR) (UG/L)	TOTAL CHRO-MIUM IN BOTTOM DE-POSITS (UG/G)
OCT.										
03...	--	--	--	--	--	--	--	--	--	--
JAN.										
15...	--	--	0	0	--	0	--	--	0	--
MAY										
17...	--	--	--	--	--	--	--	--	--	--
JUNE										
28...	--	--	--	--	--	--	--	--	--	--
SEP.										
12...	0	1	--	--	<10	0	0	0	0	4

DATE	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT IN BOTTOM DE-POSITS (UG/G)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER IN BOTTOM DE-POSITS (UG/G)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD IN BOTTOM DE-POSITS (UG/G)
OCT.									
03...	--	--	--	--	--	--	--	--	--
JAN.									
15...	--	0	--	--	0	--	--	0	--
MAY									
17...	--	--	--	--	--	--	--	--	--
JUNE									
28...	--	--	--	--	--	--	--	--	--
SEP.									
12...	0	0	2	<10	2	2	<50	4	20

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.--Continued

WATER QUALITY OATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER I973

OATE	OIS-SOLVEO LITHIUM (LI) (UG/L)	TOTAL MERCURY (HG) (UG/L)	OIS-SOLVEO MERCURY (HG) (UG/L)	TOTAL MERCURY IN BOTTOM DE-POSITS (UG/G)	TOTAL SELE-NIUM (SE) (UG/L)	OIS-SOLVEO SELE-NIUM (SE) (UG/L)	TOTAL SELE-NIUM IN BOTTOM OE-POSITS (UG/G)	OIS-SOLVEO STRON-TIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.									
03...	--	--	--	--	--	--	--	--	--
JAN.									
I5...	0	--	--	--	--	--	--	0	--
MAY									
I7...	--	--	--	--	--	--	--	60	--
JUNE									
28...	--	--	--	--	--	--	--	30	--
SEP.									
I2...	--	.0	.0	.0	10	I0	0	--	30

DATE	OIS-SOLVEO ZINC (ZN) (UG/L)	TOTAL ZINC IN BOTTOM OE-POSITS (UG/G)	OIS-SOLVEO GROSS ALPHA AS U-NAT. (UG/L)	SUS-PENOEO GROSS ALPHA AS U-NAT. (UG/L)	OIS-SOLVEO GROSS BETA AS CS-I37 (PC/L)	SUS-PENOEO GROSS BETA AS CS-I37 (PC/L)	OIS-SOLVEO GROSS BETA AS SR90 /Y90 (PC/L)	SUS-PENOEO GROSS BETA AS SR90 /Y90 (PC/L)	DIS-SOLVEO URANIUM (U) (UG/L)
OCT.									
03...	--	--	.6	<.4	.9	<.4	.8	<.4	.0I
JAN.									
15...	7	--	--	--	--	--	--	--	--
MAY									
17...	--	--	--	--	--	--	--	--	--
JUNE									
28...	--	--	--	--	--	--	--	--	--
SEP.									
12...	0	34	--	--	--	--	--	--	--

SUSPENDED-SEDIMENT DISCHARGE FOR SELECTED DAYS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	OIS-CHARGE (CFS)	SUS-PENDEO SEDI-MENT (MG/L)	SUS-PENDED SEDI-MENT OIS-CHARGE (T/DAY)
SEP.				
12...	0915	49	1	.12

03460000 CATALOOCHEE CREEK NEAR CATALOOCHEE, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	9.0	12.0	10.0	5.0	3.5	9.0	7.0	4.0	2.0	5.5	3.0
2	10.5	8.5	13.5	11.0	4.5	3.0	7.0	6.0	6.5	4.0	5.0	3.0
3	10.5	9.0	13.0	11.5	5.0	3.5	6.0	5.0	5.5	3.5	7.0	4.5
4	10.5	9.0	12.0	10.0	6.5	4.5	7.0	6.0	4.0	2.0	8.0	5.5
5	12.0	10.5	10.0	6.5	8.5	6.5	6.5	5.5	5.0	3.5	9.0	6.5
6	11.5	10.0	8.5	6.0	9.5	8.5	5.5	4.5	5.0	4.0	8.0	5.5
7	11.0	11.0	9.5	8.0	8.5	6.0	4.5	3.0	5.0	4.0	9.0	8.0
8	11.0	8.5	9.5	8.0	7.0	5.5	3.0	1.5	5.5	4.5	10.0	8.5
9	10.5	8.5	8.0	6.5	9.5	7.0	2.0	1.5	4.5	1.5	9.5	8.5
10	10.5	9.0	9.0	7.0	10.0	9.5	1.5	0.0	1.5	0.5	9.5	8.5
11	10.0	8.5	9.0	8.5	9.5	9.0	1.5	0.0	1.0	0.0	10.0	9.0
12	11.5	9.5	9.0	6.5	10.0	9.5	0.5	0.0	2.0	0.0	9.5	7.0
13	12.0	11.0	10.0	7.0	10.0	10.0	0.5	0.0	3.5	2.0	9.0	5.5
14	12.0	10.5	10.0	9.5	10.0	10.0	0.5	0.5	4.5	3.5	11.0	6.5
15	12.0	11.0	9.5	5.5	10.0	9.5	1.5	0.5	4.0	3.0	10.0	9.5
16	11.0	9.0	5.5	4.0	8.5	3.0	1.5	0.5	3.0	0.0	9.5	8.5
17	13.0	11.0	5.5	5.5	3.0	1.0	2.0	0.5	0.0	0.0	8.5	5.0
18	11.5	10.5	6.0	4.5	4.0	2.0	3.5	1.5	0.0	0.0	5.5	4.0
19	10.5	8.0	7.0	6.0	5.0	3.5	4.5	3.5	2.0	0.0	7.0	4.0
20	8.0	5.5	7.0	6.0	6.5	5.0	3.5	1.5	2.0	0.5	7.0	5.5
21	8.0	5.5	6.0	5.0	7.0	6.0	4.0	2.0	2.0	1.0	7.0	5.0
22	9.5	6.0	5.0	4.0	8.0	7.0	5.5	4.0	1.5	0.0	5.5	3.5
23	10.5	9.5	4.0	3.5	8.5	8.0	5.0	3.5	3.5	1.0	6.0	3.0
24	11.5	10.5	3.5	1.5	8.5	6.5	4.0	2.0	3.5	0.5	7.0	4.0
25	11.0	9.0	5.0	3.0	7.0	6.5	3.5	1.5	4.0	1.5	6.5	5.5
26	9.0	8.0	5.0	4.5	6.5	5.0	4.5	3.0	5.0	3.5	6.5	6.0
27	9.0	7.0	4.5	3.0	5.0	3.0	5.5	4.5	5.0	4.0	7.0	5.5
28	10.5	9.0	6.0	4.5	4.5	3.0	5.0	4.0	5.5	4.0	7.0	6.0
29	10.5	10.0	6.0	4.0	5.5	4.5	4.5	0.5	---	---	6.5	6.0
30	10.5	9.0	5.0	4.5	7.0	5.5	0.5	0.0	---	---	9.5	6.0
31	10.5	10.0	---	---	9.0	7.0	2.0	0.0	---	---	10.5	9.0
MONTH	13.0	5.5	13.5	1.5	10.0	1.0	9.0	0.0	6.5	0.0	11.0	3.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	9.5	14.0	10.0	14.0	12.0	15.5	14.5	18.0	17.0	18.5	15.5
2	10.5	8.5	13.5	11.5	14.5	12.0	17.0	14.5	18.5	16.5	19.0	16.0
3	10.5	7.0	13.0	12.0	14.0	13.0	18.0	15.0	19.5	17.0	18.0	15.5
4	10.5	9.0	12.0	9.0	15.0	13.5	16.5	15.5	19.0	17.0	18.0	16.0
5	9.0	7.0	11.0	8.0	15.0	13.5	18.0	16.0	19.0	16.5	18.5	16.5
6	9.0	4.5	10.0	8.0	14.5	14.0	17.0	15.5	18.5	16.5	18.0	15.5
7	8.5	7.0	12.0	10.0	15.0	14.0	17.0	15.5	18.5	17.0	19.0	16.5
8	8.5	8.0	12.0	11.5	16.0	14.0	16.5	16.0	18.5	17.0	18.0	16.5
9	9.0	7.0	14.0	11.5	15.5	14.5	18.5	15.5	19.0	16.5	18.0	16.5
10	8.5	5.0	13.5	10.5	16.5	14.5	18.0	16.0	18.5	17.0	18.0	16.5
11	7.0	4.0	14.5	12.0	17.0	15.0	18.5	16.5	19.0	17.0	18.0	15.5
12	8.5	4.5	13.5	11.5	16.5	15.5	18.0	15.5	19.0	17.0	16.5	14.5
13	8.5	5.5	13.0	10.0	16.0	15.0	18.0	14.5	18.5	17.0	16.0	14.5
14	9.0	4.5	12.0	9.5	16.0	14.5	17.0	16.0	18.5	17.0	17.0	15.0
15	10.5	5.5	12.0	10.5	16.0	15.0	18.0	16.5	18.5	16.5	16.5	15.5
16	9.5	8.0	11.5	8.0	15.5	15.0	18.0	16.5	18.0	16.0	16.5	14.5
17	9.5	9.0	11.5	9.5	16.0	14.5	18.5	16.5	17.0	16.5	16.5	14.5
18	10.0	9.5	10.5	8.0	15.5	14.5	18.0	17.0	18.5	17.0	16.0	14.0
19	11.0	10.0	11.0	9.0	15.5	14.5	18.0	16.5	18.5	15.5	15.0	12.0
20	14.0	10.0	13.0	11.0	15.5	15.0	18.0	16.5	18.0	15.0	15.5	13.0
21	15.5	11.0	13.0	10.0	15.0	14.5	18.5	16.5	16.5	14.5	16.0	13.5
22	14.5	11.5	13.5	10.0	15.5	14.5	19.0	16.5	16.0	15.0	16.5	14.5
23	13.5	12.0	15.0	13.0	15.5	13.5	18.5	16.5	16.0	14.0	17.0	15.0
24	14.0	11.5	14.5	13.0	15.0	13.0	18.0	16.5	16.5	14.0	16.5	15.0
25	13.5	13.0	14.0	12.0	15.0	13.5	17.0	16.5	16.0	15.5	17.0	15.5
26	13.0	12.0	14.0	13.0	15.5	13.5	18.0	16.5	16.5	14.5	16.5	16.0
27	12.0	9.0	14.0	13.5	15.0	14.0	18.0	16.5	17.0	14.5	16.5	16.0
28	9.0	7.0	14.0	13.5	15.0	14.5	18.5	16.0	18.0	15.5	17.0	15.5
29	11.0	6.0	14.0	13.0	15.5	14.0	19.0	16.5	18.5	16.0	18.0	16.0
30	11.5	9.0	14.0	11.5	15.0	14.0	18.0	16.0	19.5	16.5	17.0	16.5
31	---	---	14.0	12.0	---	---	18.0	16.5	19.0	16.5	---	---
MONTH	15.5	4.0	15.0	8.0	17.0	12.0	19.0	14.5	19.5	14.0	19.0	12.0
YEAR	19.5	0.0										

03460766 PIGEON RIVER AT WATERVILLE, N. C.

LOCATION.--Lat 35°46'32", long 83°06'01", Haywood County, at tailrace of Carolina Power and Light Co. powerplant upstream from Big Creek, at Waterville, and at mile 25.9.

DRAINAGE AREA.--536 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1967, water years 1968-69 (partial-record station), October 1969 to July 1973 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
24...A	1130	1720	--	--	--	--	--	--	--	--
NOV.										
14...	1000	2270	9.3	0	25	4.7	33	2.3	43	0
14...A	1000	2270	--	--	--	--	--	--	--	--
JAN.										
16...A	1030	1440	--	--	--	--	--	--	--	--
MAR.										
28...	1000	3050	8.4	0	12	1.3	14	1.1	22	0
28...A	1000	3050	--	--	--	--	--	--	--	--
APR.										
26...A	1030	3190	--	--	--	--	--	--	--	--
MAY										
16...	1115	1680	6.0	--	11	1.6	17	1.6	21	0
16...A	1115	1680	--	--	--	--	--	--	27	0
JUNE										
27...A	1030	1980	--	--	--	--	--	--	29	--
JULY										
25...A	1030	1980	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.										
24...A	--	--	--	--	--	--	--	--	--	--
NOV.										
14...	35	21	67	.2	--	1.1	--	.000	213	188
14...A	37	--	--	--	--	--	--	--	--	--
JAN.										
16...A	--	--	--	--	--	--	--	--	--	--
MAR.										
28...	18	8.2	26	.1	--	.70	--	.052	96	85
28...A	33	--	--	--	--	--	--	--	--	--
APR.										
26...A	--	--	--	--	--	--	--	--	--	--
MAY										
16...	17	13	27	.2	.3	--	.004	.020	102	88
16...A	22	--	--	--	--	--	--	--	--	--
JUNE										
27...A	24	--	--	--	--	--	--	--	--	--
JULY										
25...A	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.										
24...A	--	--	--	--	--	--	300	7.3	14.0	18.5
NOV.										
14...	.29	1310	82	47	46	1.6	340	7.0	--	--
14...A	--	--	--	--	--	--	360	7.4	13.1	15.5
JAN.										
16...A	--	--	--	--	--	--	240	7.3	5.5	6.0
MAR.										
28...	.13	791	36	18	45	1.0	140	6.5	--	--
28...A	--	--	--	--	--	--	120	7.4	10.0	12.8
APR.										
26...A	--	--	--	--	--	--	175	7.2	20.0	32.0
MAY										
16...	.14	453	34	17	51	1.3	169	6.6	--	--
16...A	--	--	--	--	--	--	140	7.4	15.0	16.0
JUNE										
27...A	--	--	--	--	--	--	140	--	20.0	24.0
JULY										
25...A	--	--	--	--	--	--	275	6.7	27.0	30.0

03460766 PIGEON RIVER AT WATERVILLE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	BIO-CHEM-ICAL OXYGEN DEMAND (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	IMME-DIATE COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
OCT.							
24... A	--	5.0	--	--	4500	--	--
NOV.							
14...	10	--	4.0	6.9	--	.12	--
14... A	--	8.1	--	--	15900	--	--
JAN.							
16... A	--	10.2	--	--	3700	--	--
MAR.							
28...	30	--	.7	11	--	.00	--
28... A	--	10.2	--	--	12000	--	--
APR.							
26... A	--	9.3	--	--	9200	--	--
MAY							
16...	30	--	1.5	8.4	--	.20	60
16... A	--	9.7	--	1.7	2400	--	--
JUNE							
27...	--	--	1.6	--	--	--	--
27... A	--	7.0	--	--	3500	--	--
JULY							
25... A	--	6.6	--	--	2000	--	--

TENNESSEE RIVER BASIN

03462000 NORTH TOE RIVER AT ALTAPASS, N. C.

LOCATION.--Lat 35°53'59", long 82°01'50", Mitchell County, 0.1 mile upstream from Rose Creek, 0.1 mile downstream from discontinued gaging station, and 1.0 mile northwest of Altapass.

DRAINAGE AREA.--104 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1948 to September 1949, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1948 to September 1949.

EXTREMES.--1948-49:
Dissolved solids: Maximum, 35 mg/l Nov. 1-10; minimum, 25 mg/l Jan. 1-10.
Hardness: Maximum, 14 mg/l Nov. 1-10; minimum, 9 mg/l Dec. 21-31, Jan. 1-10.
Water temperatures: Maximum, 23.5°C June 26; minimum, freezing point Dec. 26, Mar. 1.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1955-58.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
15...	1130	138	9.8	0	3.1	1.0	2.5	1.1	12	0
15... A	1130	138	--	--	--	--	--	--	--	--
MAR.										
27...	1115	358	8.9	0	2.5	.9	1.8	.4	8	0
27... A	1115	358	--	--	--	--	--	--	--	--
MAY										
14...	1445	342	6.0	--	2.5	.9	1.8	.7	10	0
14... A	1445	342	--	--	--	--	--	--	13	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NOV.										
15...	10	2.6	3.9	.2	--	.40	--	.000	33	32
15... A	13	--	--	--	--	--	--	--	--	--
MAR.										
27...	7	3.8	2.9	.0	--	.50	--	.021	30	28
27... A	--	--	--	--	--	--	--	--	--	--
MAY										
14...	8	.9	2.3	.2	.2	--	.005	.010	25	20
14... A	11	--	--	--	--	--	--	--	--	--

03462000 NORTH TOE RIVER AT ALTAPASS, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.										
15...	.04	12.3	12	2	29	.3	42	6.4	--	--
15... A	--	--	--	--	--	--	43	6.8	8.1	6.6
MAR.										
27...	.04	29.0	10	3	27	.2	34	6.2	--	--
27... A	--	--	--	--	--	--	34	7.2	8.8	13.6
MAY										
14...	.03	23.1	10	2	27	.2	31	6.4	--	--
14... A	--	--	--	--	--	--	30	6.1	14.0	20.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
NOV.					
15...	0	--	7.6	.02	--
15... A	--	12.1	--	--	--
MAR.					
27...	15	--	8.1	.00	--
27... A	--	10.8	--	--	--
MAY					
14...	10	--	6.4	.15	60
14... A	--	10.2	17	--	--

TENNESSEE RIVER BASIN

03463786 NORTH TOE RIVER AT HUNTDALE, N. C.

LOCATION.--Lat 36°01'35", long 82°19'16", Mitchell County, at bridge on State Highway 26 at Huntdale, and 0.5 mile upstream from Cane River.

DRAINAGE AREA.--442 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
15...	1430	800	14	0	3.6	1.4	2.1	1.2	14	0
15... A	1430	800	--	--	--	--	--	--	--	--
MAR.										
27...	1500	1620	9.1	0	3.5	1.1	2.0	.6	12	0
27... A	1500	1620	--	--	--	--	--	--	--	--
MAY										
15...	1315	1200	10	--	3.3	1.3	2.2	.6	13	0
15... A	1315	1200	--	--	--	--	--	--	15	0

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NOV.										
15...	11	3.2	2.9	.5	--	.40	--	.000	41	38
15... A	13	--	--	--	--	--	--	--	--	--
MAR.										
27...	10	.8	2.2	.2	--	.60	--	.021	41	28
27... A	--	--	--	--	--	--	--	--	--	--
MAY										
15...	11	3.8	1.6	.4	.2	--	.004	.010	31	30
15... A	12	--	--	--	--	--	--	--	--	--

03463786 NORTH TOE RIVER AT HUNTDALE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.										
15...	.06	88.6	15	4	22	.2	44	6.5	--	--
15...A	--	--	--	--	--	--	43	6.8	8.3	9.5
MAR.										
27...	.06	179	13	3	24	.2	37	6.2	--	--
27...A	--	--	--	--	--	--	37	7.2	9.4	13.6
MAY										
15...	.04	100	14	3	25	.3	41	6.4	--	--
15...A	--	--	--	--	--	--	35	6.4	15.0	19.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
NOV.					
15...	0	--	7.1	.04	--
15...A	--	11.9	--	--	--
MAR.					
27...	20	--	12	.00	--
27...A	--	10.3	--	--	--
MAY					
15...	10	--	8.3	.15	60
15...A	--	10.2	9.6	--	--

TENNESSEE RIVER BASIN

03464000 CANE RIVER NEAR SIOUX, N. C.

LOCATION.--Lat 36°00'52", long 82°19'40", Yancey County, at gaging station on right bank on Secondary Road 1417, 1.3 miles upstream from confluence with North Toe River, and 2.0 miles east of Sioux.

DRAINAGE AREA.--157 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1952, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1951 to September 1952.

EXTREMES.--1951-52:
Dissolved solids: Maximum, 43 mg/l July 21-31, Aug. 1-10, 1952; minimum, 28 mg/l Mar. 11-20, May 1-10, 1952.
Hardness: Maximum, 18 mg/l Oct. 11-20, 1951, July 1-10, Aug. 1-10, 1952; minimum, 10 mg/l Mar. 11-20, 1952.
Water temperatures: Maximum, 26.0°C June 16, July 12, 1952; minimum, freezing point on several days during November, December 1951, January 1952.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1955-67. Samples were collected at bridge 1.0 mile downstream during 1952 water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
25...	1500	166	11	0	3.9	1.4	2.4	1.4	18	0
25...A	1500	166	--	--	--	--	--	--	--	--
DEC.										
12...	1130	770	10	0	3.3	1.4	2.7	1.2	14	0
12...A	1130	770	--	--	--	--	--	--	--	--
FEB.										
21...	1615	265	11	0	2.9	2.0	1.7	.8	13	0
21...A	1615	265	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.									
25...	15	2.2	2.8	.0	.30	.000	41	36	.06
25...A	--	--	--	--	--	--	--	--	--
DEC.									
12...	11	3.8	3.0	.0	.70	.000	41	36	.06
12...A	--	--	--	--	--	--	--	--	--
FEB.									
21...	11	3.8	1.6	.0	1.0	.000	32	35	.04
21...A	13	--	--	--	--	--	--	--	--

03464000 CANE RIVER NEAR SIOUX, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
25...	18.4	16	1	23	.3	47	6.4	--	--
25... A	--	--	--	--	--	--	6.5	12.0	13.0
DEC.									
12...	85.2	14	3	27	.3	47	5.8	--	--
12... A	--	--	--	--	--	--	6.5	8.0	18.0
FEB.									
21...	22.9	15	5	18	.2	39	6.7	--	--
21... A	--	--	--	--	--	--	7.0	4.0	--

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT.					
25...	10	--	11	4600	.04
25... A	--	10.0	--	--	--
DEC.					
12...	5	--	36	1000	.04
12... A	--	10.6	--	--	--
FEB.					
21...	5	--	4.2	10	.05
21... A	--	12.1	--	--	--

TENNESSEE RIVER BASIN

03464500 NOLICHUCKY RIVER AT POPLAR, N. C.

LOCATION.--Lat 36°04'29", long 82°20'41", Mitchell County, on right bank at discontinued gaging station at Poplar, 0.7 mile upstream from Hollow Poplar Creek, 3.9 miles downstream from Cane River, and at mile 106.8.

DRAINAGE AREA.--608 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1953 to September 1954, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1953 to September 1954.

EXTREMES.--1953-54:
Dissolved solids: Maximum, 40 mg/l July 1-10, 1954; minimum, 30 mg/l Feb. 20-28, Apr. 1-10, May 21-31, 1954.
Hardness: Maximum, 18 mg/l Oct. 11-20, 1953; minimum, 7 mg/l May 21-31, 1954.
Water temperatures: Maximum, 25.5°C July 15, 1954; minimum, freezing point on several days during November, December 1953 and January, February 1954.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1955.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
15...	1345	1100	10	0	3.5	1.8	2.2	1.1	14	0
15... A	1345	1100	--	--	--	--	--	--	--	--
MAR.										
27...	1415	1880	9.3	0	3.1	1.1	1.7	.6	12	0
27... A	1415	1880	--	--	--	--	--	--	--	--
MAY										
15...	1130	1300	10	--	3.3	1.2	2.0	.9	13	0
15... A	1130	1300	--	--	--	--	--	--	22	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NOV.										
15...	11	3.8	3.0	.6	--	.50	--	.000	33	35
15... A	13	--	--	--	--	--	--	--	--	--
MAR.										
27...	10	3.0	2.3	.1	--	.60	--	.031	28	30
27... A	--	--	--	--	--	--	--	--	--	--
MAY										
15...	11	1.8	1.6	.3	.2	--	.007	.010	30	29
15... A	18	--	--	--	--	--	--	--	--	--

03464500 NOLICHUCKY RIVER AT POPLAR, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.										
15...	.04	98.0	16	5	21	.2	43	6.5	--	--
15... A	--	--	--	--	--	--	44	6.6	8.3	9.5
MAR.										
27...	.04	142	12	0	22	.2	36	6.5	--	--
27... A	--	--	--	--	--	--	37	7.2	9.0	15.2
MAY										
15...	.04	105	13	2	23	.2	40	6.5	--	--
15... A	--	--	--	--	--	--	34	7.1	14.5	16.5

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	DIS-SOLVED STRON-TIUM (SR) (UG/L)
NOV.					
15...	3	--	7.1	.04	--
15... A	--	12.1	--	--	--
MAR.					
27...	10	--	6.1	.00	--
27... A	--	10.7	--	--	--
MAY					
15...	10	--	6.6	.09	50
15... A	--	9.5	2.8	--	--

TENNESSEE RIVER BASIN

03479000 WATAUGA RIVER NEAR SUGAR GROVE, N. C.

LOCATION.--Lat 36°14'18", long 81°49'22", Watauga County, at gaging station on right bank 250 ft upstream from bridge on Secondary Road 1121, 300 ft downstream from Cove Creek, 2.3 miles southwest of Sugar Grove, and at mile 64.4.

DRAINAGE AREA.--90.8 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1953, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1952 to September 1953.

EXTREMES.--1952-53:
Dissolved solids: Maximum, 40 mg/l June 21-30, July 1-10, Aug. 1-10, 1953; minimum, 26 mg/l Mar. 11-20, 1953.
Hardness: Maximum, 18 mg/l Nov. 1-10, 1952; minimum, 9 mg/l Mar. 11-20, 1953.
Water temperatures: Maximum, 30.0°C July 31, 1953; minimum, freezing point Dec. 15, 1952, Jan. 5, 1953.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1955-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OCT.										
31...	1100	68	12	0	6.5	2.5	3.2	1.4	28	0
31... A	1100	68	--	--	--	--	--	--	--	--
DEC.										
12...	1430	225	11	0	5.9	2.3	4.0	1.3	20	0
12... A	1430	225	--	--	--	--	--	--	--	--
FEB.										
21...	1330	135	13	0	5.4	3.2	2.6	.9	18	0
21... A	1330	135	--	--	--	--	--	--	--	--

03479000 WATAUGA RIVER NEAR SUGAR GROVE, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
OCT.									
31...	23	3.0	4.8	.0	.63	.000	50	50	.07
31... A	--	--	--	--	--	--	--	--	--
DEC.									
12...	16	5.4	5.0	.0	1.6	.000	54	52	.07
12... A	--	--	--	--	--	--	--	--	--
FEB.									
21...	15	3.8	4.4	.0	1.8	.000	45	50	.06
21... A	17	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.									
31...	--	27	4	20	.3	74	6.6	--	--
31... A	--	--	--	--	--	--	6.8	10.0	15.5
DEC.									
12...	32.8	24	8	25	.4	74	6.2	--	--
12... A	--	--	--	--	--	--	6.5	7.0	18.0
FEB.									
21...	16.4	27	12	17	.2	66	6.4	--	--
21... A	--	--	--	--	--	--	6.5	5.0	--

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT.					
31...	5	--	11	20	.04
31... A	--	10.1	--	--	--
DEC.					
12...	3	--	20	250	.05
12... A	--	10.2	--	--	--
FEB.					
21...	10	--	11	<10	.08
21... A	--	11.9	--	--	--

03479269 WATAUGA RIVER AT BEECH CREEK, N. C.

LOCATION.--Lat 36°16'10", long 81°53'02", Watauga County, on right bank 50 ft upstream from bridge on Secondary Road 1200, 0.6 mile upstream from Beech Creek, 1.0 mile northeast of village of Beech Creek, 6.1 miles downstream from gaging station, and at mile 58.3.

DRAINAGE AREA.--126 sq mi.

PERIOD OF RECORD.--Water temperatures: July 1971 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 26.0°C July 9, Aug. 29, 30, 31, Sept. 2; minimum, freezing point on several days in December, January, and February.

REMARKS.--Temperature data furnished by the Tennessee Valley Authority.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	12.0	13.5	11.5	3.5	3.0	10.0	9.0	4.5	3.0	7.0	5.0
2	15.0	11.5	14.0	11.0	4.0	3.0	9.0	6.0	8.0	4.5	8.0	5.5
3	15.5	12.0	15.0	14.0	5.5	3.5	6.0	5.0	6.5	4.0	9.0	8.0
4	15.5	14.0	14.5	13.0	6.0	5.0	7.0	5.0	5.0	3.0	11.0	9.0
5	15.5	14.0	13.0	10.0	9.0	6.0	7.0	6.5	6.5	4.0	11.0	10.0
6	15.0	14.5	10.5	8.5	11.0	9.0	6.5	4.0	6.0	5.5	10.5	10.0
7	14.5	13.5	9.5	8.5	10.5	7.0	4.0	1.0	8.0	5.5	11.0	10.0
8	14.0	12.0	9.5	8.0	8.0	6.0	1.0	1.0	7.0	5.0	13.0	11.0
9	14.5	12.0	8.5	7.0	10.5	8.0	1.0	1.0	5.0	1.5	13.0	11.5
10	13.5	11.0	9.5	8.5	11.5	10.5	1.0	0.5	1.5	0.0	11.5	11.0
11	13.0	10.0	9.5	8.5	11.5	10.5	0.5	0.5	1.0	0.0	11.0	11.0
12	14.0	12.0	9.0	7.0	10.5	10.0	0.5	0.5	1.5	0.0	12.0	9.5
13	16.0	14.0	9.5	8.0	10.5	10.0	0.5	0.0	4.0	1.5	12.0	9.0
14	16.0	15.0	10.5	9.5	11.0	10.5	0.0	0.0	5.0	4.0	13.5	10.0
15	16.0	14.0	10.0	5.5	11.0	6.5	0.5	0.0	5.0	3.0	13.5	12.0
16	14.0	12.0	5.5	4.5	6.5	0.5	0.5	0.5	3.0	0.0	12.0	11.0
17	15.0	13.0	4.5	4.5	0.5	0.0	1.5	0.5	0.0	0.0	11.0	5.0
18	14.5	13.0	5.5	4.5	0.5	0.0	4.0	1.5	0.0	0.0	7.0	4.0
19	13.0	8.5	5.5	5.5	3.5	0.5	5.5	4.0	1.0	0.0	8.0	4.5
20	8.5	6.5	5.5	5.0	6.0	3.5	5.0	3.5	0.5	0.5	8.0	6.0
21	8.5	5.5	5.0	4.5	6.5	6.0	4.5	3.0	3.5	0.5	8.0	5.5
22	9.5	7.0	5.0	3.5	8.0	6.5	6.5	3.5	2.0	0.5	6.5	4.5
23	11.0	9.5	3.5	2.0	8.5	8.0	6.0	4.5	3.5	1.0	8.0	4.5
24	13.5	11.0	2.0	0.5	8.5	7.0	5.5	3.5	5.0	2.0	9.0	5.0
25	13.5	11.0	3.0	1.5	8.5	7.0	4.5	1.5	5.5	3.0	9.5	7.0
26	11.0	9.0	4.0	3.0	7.0	4.5	4.5	3.0	6.5	5.0	9.0	8.0
27	10.0	9.0	3.5	2.0	4.5	3.5	5.5	4.5	6.5	6.0	9.0	8.5
28	11.5	9.5	4.5	3.5	4.0	2.0	6.0	5.5	8.0	5.5	10.5	8.5
29	11.5	11.5	4.5	4.0	5.0	4.0	6.0	1.0	---	---	10.0	8.0
30	12.0	10.0	4.0	3.5	8.5	5.0	1.5	0.0	---	---	11.0	8.0
31	11.5	11.5	---	---	10.0	8.5	3.0	0.5	---	---	13.0	11.0
MONTH	16.0	5.5	15.0	0.5	11.5	0.0	10.0	0.0	8.0	0.0	13.5	4.0

03479269 WATAUGA RIVER AT BEECH CREEK, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	11.5	16.0	12.0	17.0	14.0	22.0	19.5	21.0	20.0	25.5	21.5
2	13.5	10.0	16.0	14.0	18.5	15.0	24.0	20.0	24.0	20.0	26.0	23.0
3	13.0	9.0	14.5	13.5	18.5	16.5	25.0	21.0	23.5	21.0	25.0	22.0
4	13.0	10.0	14.0	10.5	20.0	16.5	24.5	22.0	23.0	21.0	25.0	22.0
5	10.0	6.5	14.0	10.0	20.0	18.0	23.5	21.0	23.5	21.5	24.0	21.5
6	11.0	6.0	13.0	10.0	19.5	18.5	24.0	20.0	23.0	20.5	24.0	21.5
7	11.0	8.5	14.5	11.0	20.0	17.0	25.0	20.5	24.0	20.5	24.5	21.5
8	8.5	8.0	15.0	14.0	21.0	18.5	25.0	22.0	25.0	21.5	24.5	21.5
9	8.0	7.0	16.0	13.5	21.5	20.0	26.0	23.0	25.5	22.0	23.5	20.5
10	7.0	3.5	17.0	14.0	22.0	19.5	24.5	23.0	24.5	21.5	20.5	19.5
11	5.5	3.0	17.0	14.0	23.0	20.0	24.5	21.5	24.0	20.5	21.0	19.0
12	6.5	4.5	16.5	14.0	23.5	20.0	24.5	20.0	24.0	21.5	21.5	18.5
13	8.5	6.0	15.5	11.5	21.5	19.5	25.0	19.5	24.0	22.0	20.5	19.0
14	10.0	5.5	16.0	12.0	23.0	19.5	24.0	21.0	23.5	21.5	19.5	18.0
15	11.5	8.0	15.5	13.5	21.5	20.5	23.0	21.0	22.0	20.5	19.0	17.0
16	12.0	10.0	15.0	11.0	20.5	19.5	23.5	21.0	22.0	19.0	20.5	18.0
17	11.0	11.0	14.0	11.5	23.5	19.0	24.5	21.0	21.0	19.5	19.5	17.0
18	11.5	10.5	14.0	9.5	23.0	20.0	24.5	21.0	22.0	19.5	19.0	16.5
19	13.0	11.0	14.5	11.0	23.0	20.5	23.0	21.0	22.0	19.5	18.0	14.5
20	14.5	11.0	14.5	13.0	21.5	20.5	23.5	21.0	21.0	19.5	19.0	15.5
21	17.0	13.0	17.0	13.0	21.0	20.0	24.0	21.0	19.5	18.0	18.0	16.0
22	16.0	14.5	18.0	14.0	21.0	19.5	25.5	21.5	20.0	17.0	18.5	16.0
23	15.5	14.5	18.0	15.5	23.5	19.5	24.5	23.0	21.0	18.0	20.0	17.0
24	16.5	14.5	17.0	15.5	22.0	19.5	24.0	21.5	22.0	18.5	20.5	18.5
25	16.0	14.5	19.0	15.0	23.5	19.5	23.0	20.5	23.5	20.0	20.0	18.5
26	15.5	13.5	18.5	16.0	24.0	20.0	20.5	19.0	24.0	20.0	20.0	18.0
27	14.5	9.0	17.0	16.0	23.5	20.0	21.5	19.5	24.5	20.5	20.5	18.5
28	10.0	8.5	16.0	14.0	21.0	19.5	24.0	20.0	25.0	21.5	20.0	18.0
29	13.0	8.0	16.0	13.5	22.0	19.0	24.5	21.0	26.0	23.0	20.5	19.0
30	13.5	9.5	16.5	13.5	21.0	19.5	23.5	21.0	26.0	23.5	20.0	19.0
31	---	---	17.0	14.5	---	---	22.0	21.0	25.0	23.0	---	---
MONTH	17.0	3.0	19.0	9.5	24.0	14.0	26.0	19.0	26.0	17.0	26.0	14.5
YEAR	26.0	0.0										

TENNESSEE RIVER BASIN

03481000 ELK RIVER NEAR ELK PARK, N. C.

LOCATION.--Lat 36°11'01", long 81°57'45", Avery County, at discontinued gaging station, 0.3 mile downstream from Skalley Creek, 2.0 miles northeast of Elk Park, and at mile 17.9.

DRAINAGE AREA.--42.0 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for water years 1945, 1954-55.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
15...	0915	76	10	0	3.9	1.3	3.2	1.2	14	0
15... A	0915	76	--	--	--	--	--	--	--	--
MAR.										
27...	1000	144	9.2	0	3.3	1.1	3.0	.5	11	0
27... A	1000	144	--	--	--	--	--	--	--	--
MAY										
14...	1215	116 --	9.0	--	3.3	1.0	3.2	1.0	11	0
14... A	1215	116	--	--	--	--	--	--	19	0

03481000 ELK RIVER NEAR ELK PARK, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
NOV.										
15...	11	3.4	5.9	.2	--	.60	--	.000	40	38
15... A	14	--	--	--	--	--	--	--	--	--
MAR.										
27...	9	1.6	5.8	.1	--	.90	--	.000	36	34
27... A	--	--	--	--	--	--	--	--	--	--
MAY										
14...	9	.7	5.5	.1	.5	--	.007	.020	31	32
14... A	16	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED SOLIDS (TONS PER AC-FT)	DISSOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
NOV.										
15...	.05	8.23	15	4	30	.4	49	6.6	--	--
15... A	--	--	--	--	--	--	50	7.1	6.2	2.0
MAR.										
27...	.05	14.0	13	4	33	.4	44	6.3	--	--
27... A	--	--	--	--	--	--	43	7.2	6.8	10.0
MAY										
14...	.04	--	12	3	34	.4	43	6.4	--	--
14... A	--	--	--	--	--	--	38	7.8	11.0	17.0

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DISSOLVED STRONTIUM (SR) (UG/L)
NOV.					
15...	5	--	5.6	.07	--
15... A	--	12.8	--	--	--
MAR.					
27...	10	--	8.8	.00	--
27... A	--	11.8	--	--	--
MAY					
14...	10	--	7.0	.09	60
14... A	--	11.6	.5	--	--

03500000 LITTLE TENNESSEE RIVER NEAR PRENTISS, N. C.

LOCATION.--Lat 35°08'57", long 83°22'46", Macon County, temperature recorder at gaging station on left bank 600 ft upstream from Owensby Branch, 0.5 mile upstream from Cartoogechaye Creek, 2 miles north of Prentiss, and at mile 119.5.

DRAINAGE AREA.--140 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1953, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1952 to September 1953, October 1968 to September 1973.

EXTREMES.--1972-73:
Water temperatures: Maximum, 22.0°C Sept. 7, 10; minimum, 1.5°C Jan. 13, 14, 30, Feb. 17.

Period of record:
Dissolved solids (1952-53): Maximum, 33 mg/l Mar. 1-10, 1953; minimum, 19 mg/l Feb. 20-28, 1953.
Hardness (1952-53): Maximum, 10 mg/l Oct. 1-10, Nov. 1-10, 1952, Feb. 11-19, 1953; minimum, 5 mg/l on many days during March, April, June, and July 1953.
Water temperatures: Maximum, 25.5°C July 6, 12-14, 1953; minimum, freezing point Dec. 16, 1968, Jan. 8-12, 22, 1970.

REMARKS.--Miscellaneous chemical data published for water years 1946, 1955-67. Temperature records for October 1968 to September 1973 furnished by the Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
13...	1020	422	7.5	0	1.6	.5	2.0	.4	7	0
13... A	1020	422	--	--	--	--	--	--	--	--
FEB.										
20...	1030	576	8.3	0	1.2	.4	1.1	.4	8	0
20... A	1030	576	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
DEC.									
13...	6	2.2	2.0	.0	.00	.000	28	20	.04
13... A	--	--	--	--	--	--	--	--	--
FEB.									
20...	7	1.4	.2	.0	.00	.000	16	17	.02
20... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
13...	31.9	6	1	40	.4	22	5.3	--	--
13... A	--	--	--	--	--	--	6.3	14.0	21.0
FEB.									
20...	24.9	5	0	32	.2	19	6.1	--	--
20... A	--	--	--	--	--	--	7.4	3.0	5.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.					
13...	5	--	56	--	.04
13... A	--	9.4	--	--	--
FEB.					
20...	15	--	10	30	.02
20... A	--	11.4	--	--	--

03500000 LITTLE TENNESSEE RIVER NEAR PRENTISS, N. C.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	14.0	15.0	13.0	8.0	6.5	11.5	10.5	8.0	5.0	8.5	7.0
2	15.0	13.5	15.5	15.0	6.5	5.5	10.5	9.5	9.5	8.0	8.0	7.0
3	15.0	13.5	16.0	15.5	6.5	5.5	9.5	8.5	9.0	6.5	10.0	7.0
4	14.5	13.5	15.5	13.5	9.0	6.5	10.0	8.5	6.5	5.0	10.5	9.5
5	16.0	14.5	13.5	11.5	10.5	9.5	9.0	8.5	8.0	6.0	11.5	10.0
6	15.5	15.0	11.5	10.5	12.0	10.5	---	---	8.5	7.0	11.5	10.0
7	15.5	14.5	12.0	11.0	11.5	9.0	---	---	8.5	6.5	11.0	10.5
8	15.5	13.5	12.0	11.5	9.5	8.5	---	---	8.5	8.0	13.0	10.5
9	14.5	12.0	11.5	10.0	12.0	9.5	---	---	8.0	5.0	13.0	11.0
10	15.0	13.0	11.5	10.5	13.5	12.0	4.5	3.5	5.0	4.0	12.0	11.0
11	14.0	12.0	12.0	11.0	13.5	12.0	4.0	3.0	4.5	3.0	12.0	11.0
12	15.0	12.0	12.0	10.5	12.0	11.5	3.5	2.0	4.0	3.5	12.0	10.0
13	16.0	14.0	12.0	11.0	13.0	11.5	3.0	1.5	5.5	4.0	11.5	9.5
14	16.0	14.5	13.5	12.0	13.0	13.0	3.0	1.5	6.5	5.5	13.5	10.0
15	16.5	15.0	12.0	10.0	13.0	9.5	4.5	3.0	6.5	6.0	14.0	12.0
16	15.5	14.0	10.0	8.5	9.5	5.0	4.5	3.0	6.0	3.5	13.5	12.0
17	16.5	14.5	9.0	8.5	5.0	4.0	4.5	3.5	3.5	1.5	13.0	8.0
18	15.5	13.5	8.5	7.0	5.0	4.0	5.5	4.0	3.5	2.0	8.5	6.5
19	14.0	13.0	9.0	8.0	6.5	4.5	7.0	5.5	4.5	3.0	9.5	6.5
20	13.0	10.0	9.5	9.0	9.0	6.5	6.5	5.0	4.5	3.5	9.5	9.0
21	10.0	8.5	9.5	8.5	10.0	9.0	6.0	5.0	5.5	4.0	9.5	8.5
22	10.0	8.5	9.0	8.0	10.5	10.0	7.0	6.0	5.0	4.0	8.5	6.0
23	13.0	10.0	8.0	6.5	11.0	10.5	7.0	6.0	6.0	4.5	9.5	6.5
24	14.5	13.0	6.5	5.0	10.5	9.5	6.0	5.0	6.5	5.0	10.0	8.5
25	14.0	12.0	6.5	5.0	10.0	9.0	5.0	4.0	7.0	5.5	10.0	9.0
26	13.5	11.5	8.0	6.5	9.0	6.5	6.0	4.5	9.0	7.0	9.5	9.0
27	12.0	11.0	7.0	6.0	6.5	6.0	6.5	6.0	9.5	8.5	11.5	9.0
28	14.0	12.0	8.5	7.0	7.0	5.5	6.5	6.0	9.0	8.5	11.5	10.0
29	14.0	13.5	8.5	7.0	8.5	7.0	6.5	3.5	---	---	10.0	9.0
30	13.5	13.0	8.0	7.0	10.0	8.5	3.5	1.5	---	---	12.0	9.0
31	14.0	13.5	---	---	11.5	10.0	5.0	2.0	---	---	12.0	11.5
MONTH	16.5	8.5	16.0	5.0	13.5	4.0	11.5	1.5	9.5	1.5	14.0	6.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	11.5	14.5	13.0	14.5	13.5	17.0	16.0	19.0	18.5	21.5	19.5
2	13.5	10.5	14.5	13.5	15.5	14.0	18.5	16.0	19.5	18.0	21.5	19.5
3	12.0	9.5	14.5	13.5	16.5	15.0	19.0	17.0	20.0	18.5	21.5	19.0
4	12.0	11.5	14.0	12.0	17.0	15.5	19.0	18.0	19.5	18.5	21.0	19.5
5	11.5	9.0	13.0	10.5	16.0	15.0	19.5	18.0	20.0	18.5	21.5	19.5
6	10.5	8.0	12.0	10.0	15.5	14.5	19.5	18.0	20.0	18.5	21.0	19.5
7	10.5	9.0	13.0	11.0	16.0	14.5	19.5	18.0	20.5	18.5	22.0	19.5
8	10.0	9.0	13.5	13.0	16.0	15.5	19.0	17.0	21.5	19.5	21.5	20.0
9	10.0	9.0	14.5	12.0	16.0	15.5	19.5	17.0	21.5	20.0	21.0	20.0
10	9.0	6.0	14.5	12.0	16.0	15.5	19.5	18.5	21.0	20.0	22.0	20.0
11	8.0	5.0	14.5	13.5	17.0	15.5	20.0	18.5	21.5	19.5	21.5	20.0
12	9.0	6.0	14.5	13.0	17.0	16.0	19.5	18.0	20.5	20.0	21.0	19.0
13	10.5	8.5	13.5	12.0	16.5	15.5	19.5	17.0	20.5	19.5	20.0	18.0
14	10.5	8.5	13.5	11.5	16.5	15.5	19.5	18.0	21.0	19.5	19.0	17.0
15	11.5	9.5	13.5	12.0	17.0	15.5	19.0	18.0	21.0	19.5	20.0	18.5
16	11.5	10.5	13.0	10.5	16.5	16.0	19.0	18.0	20.5	19.0	19.5	18.0
17	11.0	10.5	12.0	10.5	17.0	15.5	19.0	17.0	20.0	18.5	19.0	18.0
18	12.0	11.0	12.0	10.0	18.0	16.0	19.5	18.0	19.5	18.5	19.0	18.0
19	12.0	11.5	12.0	10.5	17.0	16.5	19.0	18.0	19.0	18.5	18.0	16.0
20	14.0	11.5	13.5	11.5	17.0	16.0	19.5	17.0	19.0	18.5	18.0	15.5
21	15.0	13.5	14.5	12.0	16.5	16.0	19.5	18.0	19.5	18.0	18.5	16.0
22	15.0	14.0	14.5	13.0	16.5	15.5	20.0	18.5	19.0	18.0	19.0	16.5
23	14.5	14.0	16.0	14.0	18.0	16.0	19.5	18.5	19.0	17.0	20.0	18.0
24	14.5	13.5	15.5	14.0	17.0	15.5	20.0	18.0	19.0	17.0	20.0	18.0
25	14.0	13.5	14.5	13.5	16.5	15.5	19.5	18.5	19.0	18.5	19.5	18.5
26	14.0	13.0	15.5	14.0	17.0	15.5	19.0	18.0	19.5	18.0	19.0	18.0
27	13.5	14.0	16.5	14.5	16.5	15.5	19.0	18.5	20.5	18.5	19.0	18.0
28	11.0	9.5	17.0	15.0	16.5	16.0	19.5	18.0	20.0	18.5	19.0	18.0
29	12.0	9.5	15.5	14.5	17.0	16.0	20.0	18.5	21.0	19.0	19.5	18.0
30	13.5	11.0	14.5	13.5	16.5	15.5	19.5	18.0	21.5	19.5	19.5	18.5
31	---	---	14.5	13.5	---	---	19.5	18.5	21.5	19.5	---	---
MONTH	15.0	5.0	17.0	10.0	18.0	13.5	20.0	16.0	21.5	17.0	22.0	15.5
YEAR	22.0	1.5										

03503000 LITTLE TENNESSEE RIVER AT NEEDMORE, N. C.

LOCATION.--Lat 35°20'11", long 83°31'39", Swain County, at gaging station on left bank 0.8 mile downstream from DeHart Creek, 0.8 mile north of Needmore, 2.4 miles downstream from Brush Creek, 6.3 miles downstream from Tellico Creek, and at mile 92.9.

DRAINAGE AREA.--436 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-70, 1972-73 (discontinued, partial-record station), November 1970 to September 1971.

REMARKS.--Miscellaneous chemical data published for water years 1946, 1954-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.											
02...	1550	582	7.6	270	1.8	.8	1.8	.9	10	0	8
02... A	1550	582	--	--	--	--	--	--	--	--	--
DEC.											
13...	1130	1510	8.4	0	1.6	.6	1.8	.4	7	0	6
13... A	1130	1510	--	--	--	--	--	--	--	--	--
FEB.											
20...	1200	1670	8.4	0	1.3	.5	1.0	.4	8	0	7
20... A	1200	1670	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.											
02...	2.9	1.0	--	.18	.010	.01	.22	--	.25	19	23
02... A	--	--	--	--	--	--	--	--	--	--	--
DEC.											
13...	1.8	1.8	.0	.00	--	--	--	.000	--	25	20
13... A	--	--	--	--	--	--	--	--	--	--	--
FEB.											
20...	.6	1.6	.0	.00	--	--	--	.000	--	18	18
20... A	--	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.										
02...	.03	29.9	8	0	30	.3	30	6.3	--	--
02... A	--	--	--	--	--	--	--	--	16.5	--
DEC.										
13...	.03	102	7	1	36	.3	22	5.4	--	--
13... A	--	--	--	--	--	--	--	6.5	14.0	21.0
FEB.										
20...	.02	81.2	5	0	27	.2	20	6.2	--	--
20... A	--	--	--	--	--	--	--	7.3	5.0	.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT.					
02...	10	--	8.0	--	--
DEC.					
13...	5	--	45	--	.00
13... A	--	9.2	--	--	--
FEB.					
20...	10	--	8.1	20	.33
20... A	--	10.9	--	--	--

03505500 NANTAHALA RIVER AT NANTAHALA, N. C.

LOCATION.--Lat 35°17'55", long 83°39'22", Swain County, at gaging station on left bank on U.S. Highway 19, 1.0 mile northeast of Nantahala, 2.3 miles downstream from Rowlin Creek, 2.8 miles downstream from Nantahala Dam powerhouse, and at mile 10.8.

DRAINAGE AREA.--144 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for water years 1946, 1955-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)
OCT.											
03...	0835	652	5.4	140	1.6	.5	.7	.5	7	0	6
03... A	0835	652	--	--	--	--	--	--	--	--	--
DEC.											
13...	1200	914	5.9	0	1.4	.5	1.0	.3	6	0	5
13... A	1200	914	--	--	--	--	--	--	--	--	--
FEB.											
20...	1240	801	6.7	0	1.1	.4	.7	.3	6	0	5
20... A	1240	801	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
OCT.											
03...	1.4	1.0	--	.15	.010	<.01	.08	--	.07	18	15
03... A	--	--	--	--	--	--	--	--	--	--	--
DEC.											
13...	1.8	1.9	.0	.00	--	--	--	.000	--	20	16
13... A	--	--	--	--	--	--	--	--	--	--	--
FEB.											
20...	.6	1.6	.0	.00	--	--	--	.000	--	15	15
20... A	--	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
OCT.										
03...	.02	31.7	6	0	19	.1	18	6.3	--	--
03... A	--	--	--	--	--	--	--	--	13.0	--
DEC.										
13...	.03	49.4	6	1	27	.2	16	5.7	--	--
13... A	--	--	--	--	--	--	--	6.4	15.0	20.0
FEB.										
20...	.02	32.4	4	0	24	.1	15	6.1	--	--
20... A	--	--	--	--	--	--	--	7.2	6.0	2.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT.					
03...	5	--	5.6	--	--
DEC.					
13...	5	--	19	--	.00
13... A	--	10.2	--	--	--
FEB.					
20...	5	--	7.6	<10	.05
20... A	--	9.9	--	--	--

03509000 SCOTT CREEK ABOVE SYLVA, N. C.

LOCATION.--Lat 35°23'02", long 83°12'51", Jackson County, at gaging station on right bank 100 ft downstream from bridge on Secondary Road 1431, 800 ft downstream from Allens Branch, 0.7 mile upstream from Cape Creek, 0.8 mile upstream from Sylva, and 3.3 miles upstream from mouth.

DRAINAGE AREA.--50.7 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1973 (partial-record station).

REMARKS.--Miscellaneous samples of chemical data published for water years 1945, 1955-67. Chemical data furnished by the Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.											
17...	1000	98	8.4	--	120	2.2	1.2	1.3	.7	12	0
17... A	1000	98	--	--	--	--	--	--	--	--	--
JAN.											
10...	1600	128	5.4	--	60	2.4	.7	1.5	1.0	12	0
10... A	1600	128	--	--	--	--	--	--	--	--	--
MAR.											
05...	1115	156	8.1	--	230	2.8	.7	2.3	.5	12	0
05... A	1115	156	--	--	--	--	--	--	--	--	--
MAY											
24...	1200	229	7.8	<200	470	2.0	.8	1.4	1.1	12	0
24... A	1200	229	--	--	--	--	--	--	--	--	--
AUG.											
24...	1522	66	11	<200	90	2.0	1.2	2.4	2.0	15	--
24... A	1522	66	--	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NOV.										
17...	10	2.3	1.5	.26	<.010	.03	.09	.08	27	25
17... A	--	--	--	--	--	--	--	--	--	--
JAN.										
10...	10	2.3	2.5	.21	<.010	.01	<.01	.08	21	23
10... A	--	--	--	--	--	--	--	--	--	--
MAR.										
05...	10	3.7	2.0	.28	<.010	.03	.06	.18	26	28
05... A	--	--	--	--	--	--	--	--	--	--
MAY										
24...	10	3.0	2.0	.17	<.010	.02	.12	--	20	25
24... A	--	--	--	--	--	--	--	--	--	--
AUG.										
24...	12	3.0	4.0	.14	<.010	.06	.22	.03	40	34
24... A	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.										
17...	.04	7.14	10	0	20	.2	28	6.7	--	--
17... A	--	--	--	--	--	--	--	--	7.0	6.5
JAN.										
10...	.03	7.25	9	0	24	.2	30	6.5	--	--
10... A	--	--	--	--	--	--	--	--	3.5	1.0
MAR.										
05...	.04	--	10	0	32	.3	31	6.4	--	--
05... A	--	--	--	--	--	--	--	--	10.5	21.6
MAY										
24...	.03	12.4	8	0	24	.2	27	6.8	--	--
24... A	--	--	--	--	--	--	--	--	14.0	--
AUG.										
24...	.05	--	10	0	29	.3	39	6.6	--	--
24... A	--	--	--	--	--	--	--	--	20.0	--

03509000 SCOTT CREEK ABOVE SYLVA, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	COLOR (PLATINUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
NOV.			
17...	5	--	3.8
17...A	--	10.2	--
JAN.			
10...	5	--	6.1
10...A	--	12.1	--
MAR.			
05...	5	--	7.6
05...A	--	10.6	--
MAY			
24...	20	--	3.0
24...A	--	9.6	--
AUG.			
24...	10	--	6.0
24...A	--	9.4	--

TENNESSEE RIVER BASIN

03509833 SCOTT CREEK NEAR U.S. HIGHWAY 19A, AT SYLVA, N. C.

LOCATION.--Lat 35°22'25", long 83°13'55", Jackson County, at bridge on Secondary Road 1382 at Sylva, 0.1 mile below Dills Branch, 1.5 miles downstream from gaging station, and 1.8 miles upstream from mouth.

DRAINAGE AREA.--57.0 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1973 (partial-record station). Chemical data furnished by the Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.											
17...	1300	100	5.8	--	140	4.2	1.1	4.3	1.3	158	0
17...A	1300	100	--	--	--	--	--	--	--	--	--
JAN.											
10...	1440	144	5.9	--	170	5.6	1.4	2.5	1.2	66	0
10...A	1440	144	--	--	--	--	--	--	--	--	--
MAR.											
05...	1310	167	8.1	--	270	3.6	1.1	2.5	1.0	64	0
05...A	1310	167	--	--	--	--	--	--	--	--	--
MAY											
24...	1330	290	10	800	2500	3.0	.9	2.0	1.7	37	0
24...A	1330	290	--	--	--	--	--	--	--	--	--
AUG.											
24...	1450	66	20	500	730	4.0	1.7	3.7	3.6	100	--
24...A	1450	49	--	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)
NOV.										
17...	130	34	2.0	.18	.020	24	22	.52	117	163
17...A	--	--	--	--	--	--	--	--	--	--
JAN.										
10...	54	18	2.5	.28	.010	25	<1.0	.53	63	104
10...A	--	--	--	--	--	--	--	--	--	--
MAR.										
05...	52	19	2.0	<.05	<.010	21	2.0	.44	56	97
05...A	--	--	--	--	--	--	--	--	--	--
MAY										
24...	30	12	3.0	.26	<.010	9.0	1.6	1.4	40	68
24...A	--	--	--	--	--	--	--	--	--	--
AUG.										
24...	82	16	15	.26	.030	35	4.0	.75	390	161
24...A	--	--	--	--	--	--	--	--	--	--

03509833 SCOTT CREEK NEAR U.S. HIGHWAY 19A, AT SYLVA, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
NOV.										
17...	.16	31.6	15	0	36	.5	270	8.6	--	--
17... A	--	--	--	--	--	--	--	--	9.2	--
JAN.										
10...	.09	24.5	20	0	20	.2	178	7.3	--	--
10... A	--	--	--	--	--	--	--	--	5.0	2.5
MAR.										
05...	.08	25.3	14	0	27	.3	177	6.8	--	--
05... A	--	--	--	--	--	--	--	--	11.0	--
MAY										
24...	.05	31.3	11	0	25	.3	110	6.9	--	--
24... A	--	--	--	--	--	--	--	--	15.0	--
AUG.										
24...	.53	69.5	17	0	27	.4	400	6.9	--	--
24... A	--	--	--	--	--	--	--	--	22.5	--

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
NOV.			
17...	200	--	.6
17... A	--	8.5	--
JAN.			
10...	130	--	5.3
10... A	--	10.6	--
MAR.			
05...	5	--	16
05... A	--	7.0	--
MAY			
24...	45	--	7.5
24... A	--	9.0	--
AUG.			
24...	1200	--	20
24... A	--	6.0	--

TENNESSEE RIVER BASIN

03512468 TUCKASEGEE RIVER AT U.S. HIGHWAY 19, NEAR BRYSON CITY, N. C.

LOCATION.--Lat 35°25'54", long 83°24'52", Swain County, at bridge on U.S. Highway 19, at Johnsons Branch, 1.8 miles east of Bryson City, and at mile 14.8.

DRAINAGE AREA.--603 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1971-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	TOTAL SUL-FIDE (S) (MG/L)
DEC.												
14...	1515	2490	7.0	0	1.6	.5	1.5	.5	1	0	1	<.2
14... A	1515	2490	--	--	--	--	--	--	--	--	--	--
FEB.												
21...	1600	1690	7.2	0	1.3	.7	1.0	.5	8	0	7	<.2
21... A	1600	1690	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL NON-FILT-RABLE RESIDUE (MG/L)	VOL. NON-SETTLE-ABLE RESIDUE (MG/L)	FIXED NON-FILT-RABLE RESIDUE (MG/L)
DEC.												
14...	3.0	1.4	.2	1.2	.000	26	22	.04	175	20	4	16
14... A	--	--	--	--	--	--	--	--	--	--	--	--
FEB.												
21...	1.8	.8	.0	.20	.000	21	18	.03	95.8	15	6	9
21... A	--	--	--	--	--	--	--	--	--	--	--	--

03512468 TUCKASEGEE RIVER AT U.S. HIGHWAY 19, NEAR BRYSON CITY, N. C.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TOTAL RESIDUE (MG/L)	LOSS ON IGNITION (MG/L)	RESIDUE ON IGNITION (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	AIR TEMPERATURE (DEG C)
DEC.											
14...	28	10	18	6	5	33	.3	24	4.8	--	--
14... A	--	--	--	--	--	--	--	--	6.5	14.0	20.0
FEB.											
21...	32	12	20	5	0	24	.2	25	6.3	--	--
21... A	--	--	--	--	--	--	--	--	7.7	5.0	8.0

DATE	COLOR (PLATINUM-COBALT UNITS)	DISSOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
DEC.					
14...	5	--	25	30	.03
14... A	--	10.0	--	--	--
FEB.					
21...	8	--	6.4	--	.06
21... A	--	10.9	--	--	--

TENNESSEE RIVER BASIN

03513000 TUCKASEGEE RIVER AT BRYSON CITY, N. C.

LOCATION.--Lat 35°25'40", long 83°26'50", Swain County, at gaging station on left bank 400 ft downstream from bridge on Secondary Road 1364, Everett Street, in Bryson City, 0.6 mile downstream from Deep Creek, and at mile 12.6.

DRAINAGE AREA.--655 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1950 to September 1951, October 1957 to September 1967, water years 1971-73 (discontinued, partial-record station).
Water temperatures: October 1950 to September 1951.

EXTREMES.--1950-51:
Dissolved solids: Maximum, 92 mg/l Dec. 1-10, 1950; minimum, 28 mg/l Apr. 1-10, 1951.
Hardness: Maximum, 16 mg/l Dec. 1-10, 1950; minimum, 6 mg/l Dec. 11-20, 21-31, 1950, Apr. 1-10, 1951.
Water temperatures: Maximum, 25.5°C July 13, 1951; minimum, 0.5°C Nov. 26, 1950, Feb. 3, 1951.

REMARKS.--Miscellaneous chemical data published for water years 1945, 1948, 1955-57. Analyses for the 1973 water year furnished by the Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DISCHARGE (CFS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)
OCT.										
02...	1500	808	-- 6.5	180	1.6	.8	1.2	.7	0	0
02... A	1500	808	--	--	--	--	--	--	--	--

DATE	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED NITRATE (N) (MG/L)	DISSOLVED NITRITE (N) (MG/L)	DISSOLVED AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DISSOLVED ORTHO PHOSPHATE (PO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.									
02...	0	4.1	1.0	.32	.010	3.0	1.6	.12	37
02... A	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	CARBON DIOXIDE (CO2) (MG/L)
OCT.											
02...	21	.05	8	6	24	.2	43	4.3	--	15	.0
02... A	--	--	--	--	--	--	--	--	14.0	--	--

03515007 LITTLE TENNESSEE RIVER AT N.C. HIGHWAY 28, BELOW FONTANA DAM, N. C.

LOCATION.--Lat 35°26'50", long 83°49'01", Graham County, at bridge on N. C. Highway 28, 0.8 mile downstream from Walker Branch, 1.3 miles downstream from Fontana Dam, 8.3 miles upstream from Cheoah Dam, and at mile 59.7.

DRAINAGE AREA.--1,755 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water year 1973 (discontinued, partial-record station).

REMARKS.--Miscellaneous samples of chemical data published for water years 1948, 1955, 1958, 1964. Chemical data furnished by the Tennessee Valley Authority.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED ALUM-INUM (AL) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
NOV.										
17...	1245	6.2	--	150	1.8	.5	1.2	.5	6	0
17...A	1245	--	--	--	--	--	--	--	--	--
JAN.										
23...	1400	5.7	--	30	2.0	.5	1.2	.4	5	0
23...A	1400	--	--	--	--	--	--	--	--	--
MAR.										
15...	1230	5.6	60	--	1.8	.6	.6	.5	5	0
15...A	1230	--	--	--	--	--	--	--	--	--
MAY										
10...	1235	6.5	<200	<50	2.0	.4	1.3	.7	6	0
10...A	1235	--	--	--	--	--	--	--	--	--
JULY										
26...	1500	6.0	<200	170	2.0	.6	1.4	1.0	2	--
26...A	1500	--	--	--	--	--	--	--	--	--
SEP.										
06...	1030	5.8	500	210	1.0	.6	1.6	.9	9	--
06...A	1030	--	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	DIS-SOLVED NITRITE (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)
NOV.										
17...	5	3.9	2.0	.63	.020	.23	.09	--	.05	17
17...A	--	--	--	--	--	--	--	--	--	--
JAN.										
23...	4	4.5	1.5	.52	<.010	.18	<.01	--	.05	13
23...A	--	--	--	--	--	--	--	--	--	--
MAR.										
15...	4	3.3	1.5	.41	<.010	.22	<.03	--	.06	27
15...A	--	--	--	--	--	--	--	--	--	--
MAY										
10...	5	2.0	2.0	.57	<.010	<.01	.06	--	.03	20
10...A	--	--	--	--	--	--	--	--	--	--
JULY										
26...	2	2.0	2.0	.62	<.010	.02	.20	--	.08	<10
26...A	--	--	--	--	--	--	--	--	--	--
SEP.										
06...	7	5.0	2.0	.48	<.010	.02	.06	.060	--	20
06...A	--	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS	CARBON DIOXIDE (CO2) (MG/L)
NOV.											
17...	22	.02	6	1	27	.2	26	6.3	--	5	4.8
17...A	--	--	--	--	--	--	--	--	7.0	--	--
JAN.											
23...	21	.02	7	3	26	.2	22	6.3	--	5	4.0
23...A	--	--	--	--	--	--	--	--	8.0	--	--
MAR.											
15...	19	.04	7	3	15	.1	24	6.1	--	3	6.4
15...A	--	--	--	--	--	--	--	--	11.0	--	--
MAY											
10...	20	.03	7	2	27	.2	21	6.6	--	5	2.4
10...A	--	--	--	--	--	--	--	--	47.0	--	--
JULY											
26...	19	.03	7	5	26	.2	22	6.2	--	10	2.0
26...A	--	--	--	--	--	--	--	--	14.0	--	--
SEP.											
06...	24	.03	5	0	36	.3	25	6.2	--	5	9.1
06...A	--	--	--	--	--	--	--	--	15.5	--	--

03517533 LITTLE TENNESSEE RIVER AT TAPOCO, N. C.

LOCATION.--Lat 35°27'01", long 83°56'31", Graham County, at bridge on U.S. Highway 129, 0.2 mile downstream from Cheoah River, and 0.4 mile north of Tapoco.

DRAINAGE AREA.--1,823 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
14...	1345	7940	6.7	0	1.6	.6	1.9	.6	4	0
14...A	1345	7940	--	--	--	--	--	--	--	--
FEB.										
21...	1400	7860	4.7	0	1.4	1.0	.9	.5	4	0
21...A	1400	7860	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
DEC.									
14...	3	3.6	2.0	.0	.70	.000	24	22	.03
14...A	--	--	--	--	--	--	--	--	--
FEB.									
21...	3	1.8	1.4	.0	.80	.000	19	17	.03
21...A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
14...	515	7	3	35	.3	23	5.2	--	--
14...A	--	--	--	--	--	--	6.1	13.0	21.0
FEB.									
21...	403	8	4	19	.1	22	6.2	--	--
21...A	--	-	--	--	--	--	7.5	8.0	10.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.					
14...	3	--	40	<10	.04
14...A	--	8.8	--	--	--
FEB.					
21...	10	--	4.0	<10	.03
21...A	--	9.3	--	--	--

03548500 HIWASSEE RIVER ABOVE MURPHY, N. C.

LOCATION.--Lat 35°04'50", long 84°00'10", Cherokee County, at gaging station on right bank on U.S. Highway 64, 600 ft upstream from Will Scott Creek, 2.0 miles southeast of Murphy, and at mile 99.1.

DRAINAGE AREA.--406 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1946 to September 1947, water years 1968-73 (discontinued, partial-record station).

REMARKS.--Miscellaneous chemical data published for water years 1946, 1948, 1955-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
13...	1500	752	6.7	0	1.9	.7	1.3	.5	0	0
13... A	1500	752	--	--	--	--	--	--	--	--
FEB.										
20...	1430	1790	6.9	0	1.4	.6	.9	.5	8	0
20... A	1430	1790	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
DEC.									
13...	0	3.0	7.3	.0	.02	.000	25	22	.03
13... A	--	--	--	--	--	--	--	--	--
FEB.									
20...	7	1.0	1.0	.0	.09	.000	17	17	.02
20... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
13...	50.8	8	8	26	.2	37	4.5	--	--
13... A	--	--	--	--	--	--	6.2	14.0	22.0
FEB.									
20...	82.2	6	0	23	.2	21	6.3	--	--
20... A	--	--	--	--	--	--	6.7	5.0	2.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.					
13...	3	--	.0	--	.00
13... A	--	10.2	--	--	--
FEB.					
20...	5	--	6.4	<10	.02
20... A	--	11.1	--	--	--

03550000 VALLEY RIVER AT TOMOTLA, N. C.

LOCATION.--Lat 35°08'20", long 83°58'50", Cherokee County, at gaging station on right bank 15 ft downstream from bridge on Secondary Road 1373 at Tomotla, 0.2 mile upstream from Rogers Creek, 4.7 miles northeast of Murphy, and at mile 6.6.

DRAINAGE AREA.--104 sq mi.

PERIOD OF RECORD.--Chemical analyses: October 1952 to September 1953, water years 1968-73 (discontinued, partial-record station).
Water temperatures: October 1952 to September 1953, October 1961 to September 1967.

EXTREMES.--1952-53, 1961-67:
Dissolved solids (1952-53): Maximum, 39 mg/l Aug. 1-10, Sept. 1-10, Sept. 11-20, 1953; minimum, 20 mg/l Feb. 11-19, 1953.
Hardness (1952-53): Maximum, 23 mg/l Oct. 21-31, 1952; minimum, 9 mg/l Feb. 20-28, 1953.
Water temperatures: Maximum, 23.5°C on several days in 1953, 1962, and 1964; minimum, freezing point on several days in 1962-64.

REMARKS.--Miscellaneous chemical data published for water years 1946, 1948, 1955-67.

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
OEC.										
13...	1545	618	6.0	0	3.2	.8	1.3	.4	10	0
13... A	1545	618	--	--	--	--	--	--	--	--
FEB.										
20...	1515	315	4.5	0	3.6	.8	.9	.4	15	0
20... A	1515	315	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
DEC.									
13...	8	1.8	2.1	.0	.07	.000	26	21	.04
13... A	--	--	--	--	--	--	--	--	--
FEB.									
20...	12	1.0	1.8	.0	.07	.000	23	20	.03
20... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
13...	43.4	12	4	19	.2	30	5.6	--	--
13... A	--	--	--	--	--	--	6.4	14.0	21.0
FEB.									
20...	19.6	13	0	13	.1	32	6.6	--	--
20... A	--	--	--	--	--	--	6.4	5.0	2.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.					
13...	3	--	40	--	.04
13... A	--	9.6	--	--	--
FEB.					
20...	5	--	6.0	20	.02
20... A	--	11.1	--	--	--

03555500 HIWASSEE RIVER AT APALACHIA DAM, N. C.

LOCATION.--Lat 35°10'04", long 84°17'49", Cherokee County, at Apalachia Dam, 0.1 mile upstream from North Carolina-Tennessee State line, and at mile 66.0.

DRAINAGE AREA.--1,018 sq mi.

PERIOD OF RECORD.--Chemical analyses: Water years 1968-73 (discontinued, partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TIME	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)
DEC.										
14...	1000	2680	6.1	0	2.1	.7	1.6	.5	9	0
14... A	1000	2680	--	--	--	--	--	--	--	--
FEB.										
21...	1000	2680	5.3	0	1.8	.6	1.0	.5	10	0
21... A	1000	2680	--	--	--	--	--	--	--	--

DATE	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)
DEC.									
14...	7	2.2	2.0	.0	.00	.000	24	20	.03
14... A	--	--	--	--	--	--	--	--	--
FEB.									
21...	8	1.2	2.0	.0	.07	.000	17	18	.02
21... A	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	AIR TEMP-ERATURE (DEG C)
DEC.									
14...	174	8	1	26	.2	25	5.8	--	--
14... A	--	--	--	--	--	--	6.2	16.0	20.0
FEB.									
21...	123	7	0	22	.2	24	6.5	--	--
21... A	--	--	--	--	--	--	6.6	6.0	5.0

DATE	COLOR (PLAT-INUM-COBALT UNITS)	DIS-SOLVED OXYGEN (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	FECAL COLI-FORM (COL. PER 100 ML)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
DEC.					
14...	3	--	23	30	.00
14... A	--	9.0	--	--	--
FEB.					
21...	5	--	5.1	<10	.04
21... A	--	11.1	--	--	--

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